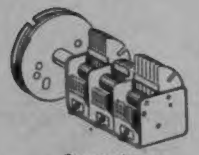
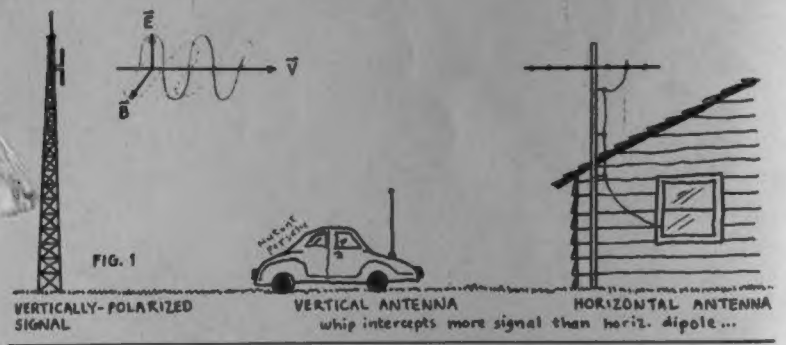


TECHNICAL TOPIX

What is meant by "polarization"? Why does a TV station broadcast with circular polarization? What's the difference between horizontal and vertical polarization? How does it affect DX? This article should serve to explain this, and introduce the reader to the idea of wave polarization.

Polarization of a radio signal is defined by the direction of its electric lines of force with respect to the earth. Any electromagnetic radiation (radio, light, x-rays, etc.) can be described in terms of three vectors. An automobile moving at some rate of speed and in some specific direction can be represented by a vector. Similarly, a radio signal is described by a velocity vector, $\vec{V}$, a magnetic field vector, $\vec{B}$, and an electric field vector, $\vec{E}$, which are all at 90° to each other. (See Fig. 1)

For radio and TV broadcasting, the polarization of a signal is an important consideration, for it affects how well a program will be received, and to a limited extent, how far. A wave whose lines of force are transmitted perpendicular to the earth is said to be vertically polarized (v). Horizontal polarization (h) implies electrical force parallel to the ground. The physical orientation of the transmitting antenna determines the type of polarization, at least at the onset of the wave's travel, and for the line-of-sight path between transmitter and receiver along a flat earth. Thus, if the elements of the antenna are horizontally oriented, a horiz. signal is transmitted, and so forth.



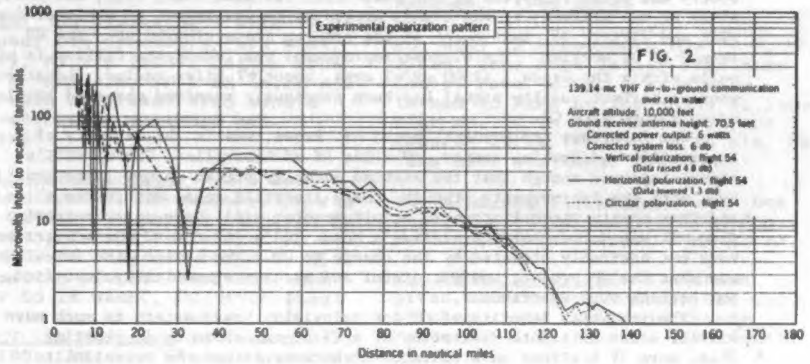
For VHF and UHF frequencies, it is important that the receiving antenna match the orientation of the transmitting antenna. This is because the polarization of a VHF wave remains quite constant. The term "polarization discrimination" means that a vertical antenna will not efficiently intercept a h signal, and vice-versa. This factor may be as great as 30-35 dB. This is a useful phenomenon for DX'ers who have both a horiz. antenna and a vert. antenna on a mast and can switch between them. Sometimes a local station, say, with only an h signal, can be nulled enough by the vertical antenna so that a DX signal can come in.

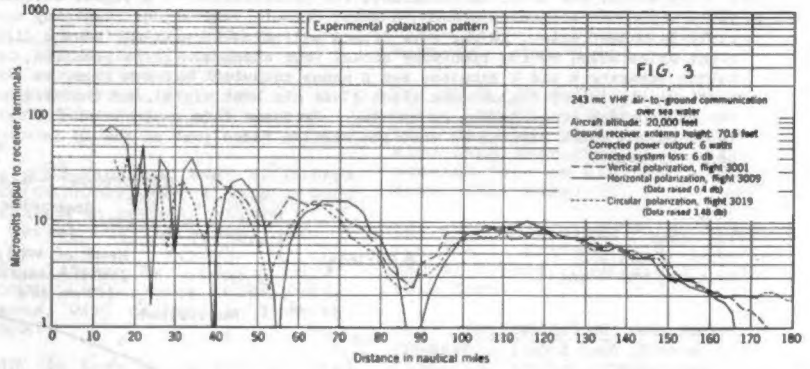
There are an infinite number of possible antenna orientations, but only h and v are in common use. (A third, circular polarization, will be considered later.) Recognizing that receiving antennas of both types are used, most TV and FM stations simultaneously transmit a h and v signal. It can be said that in the past, everybody in the broadcasting business used h, but later on in the 60's v was authorized to accomodate listeners in automobiles. Also, there is evidence that a vertically-polarized signal carries better into valleys and shadow areas where a h signal would be lost.

Adding vertical polarization to an existing broadcast facility involves investment in a second antenna, and proper cabling/power splitting to enable the same transmitter to deliver power into both antennas with correct matching. Often the second antenna is identical to the first, and is simply mounted on the tower at a 90° angle with respect to the original. For such cases, there is normally no change in the station's ERP or coverage. There is no proof that v signals always carries farther than h signals, but it is true that a v signal undergoes less groundwave attenuation than a h signal of the same power. The vast majority of all FM broadcasters now use both h and v.

Circular polarization (CP) imparts a circular, corkscrew characteristic to a radio wave. Rather than stay fixed horizontal or perpendicular to the ground, the wavefronts make one revolution per period. This is a very important characteristic because it makes the signal much less susceptible to multipath effects. Using CP will practically eliminate TV ghosting in many cases, and will ensure that a FM signal is received with equal quality no matter what the orientation of the receiving antenna.

Figures 2 and 3 are some results of extensive experiments performed in the 1950's using transmitters aboard aircraft--a convient way to vary the length of the radio path. The graphs pretty much tell the story by themselves. Notice how, for the 139 MHz case in Fig.2, the transmission from a horizontal antenna suffered some extreme peaks and nulls in the first 35 miles. It isn't hard to imagine living out in the suburbs just far enough from the tower of your favorite TV station to be in one of these nulls. Notice how the vertically-polarized signal tends to fill in the nulls of the h signal, but has its own nulls at other locations. Apparently the simultaneous transmission of h and v signals will minimize the effects of nulls at moderate range.





There is an extremely useful advantage to CP that Figs. 2 and 3 do not show. Firstly, a CP signal can be a right-hand or left-hand type; that is, a CP signal is made to either spin right or left. The receiving antenna must correspond to this choice. For instance, if a TV signal is sent out over a helical, left-hand spiral antenna, a helical right antenna will not effectively receive the signal. If any CP signal is reflected, its orientation is reversed. Therefore, a left-hand antenna will receive only the direct signal, and will reject the rigt-hand reflections. In this way, multipath problems are almost eliminated. Any linear h or v antenna will still receive the CP signal regardless of orientation.

Commercial broadcasters sometimes invest big bucks to find out where there are nulls or noisy spots in their coverage area. Obviously, station WAAA would not want their signal to be poor in a certain part of town where a competing station's signal, WBBB, comes in loud and clear. Often the use of CP will ensure that local nulls will be cancelled most of the time.

One example of CP broadcasting is that of WEZK 97.5 in Knoxville, TN. This easy-listening station learned of some serious multipath problems from the hills and tall buildings within the city. When the aging Collins h and v antennas appeared in need of replacement, the station decided to use the opportunity to try CP. The appropriate permits were granted by the FCC, and WEZK started broadcasting a CP signal in 1984.

The map of Fig. 4 illustrates the radio problem caused by East Tennessee rough terrain. Knoxville is in a gently rolling valley, but tall hills and low mountains stretch from SW to NE and surround the length of the valley. One problem area in particular was around Sevierville and Gatlinburg. These towns, and the Smoky Mountains Park are all within a 40 mile radius, but are also in the shadow of two long, low mountains and numerous high balds that render all the Knoxville stations very noisy. Here, a translator was set up to re-broadcast WEZK's programming and is apparently a satisfactory solution.

There are several problem areas in the city itself, where there is spotty and noisy reception of not just WEZK, but also WOKI, WIMZ, and WIVK. After CP was started, it was found, according to Jim Brown, an engineer for WEZK and WTVK-TV 26, that a lot of the problem areas cleared up. The CP seemed to be working: the biggest improvement was indeed the filling in of nulls within the Grade A (1000 μV/m) area, about 47 miles radius. Locations where a perfect quality signal had been previously received observed little or no change with CP.

One important improvement, noted Mr. Brown, was in the vicinity of Rogersville and Hawkins county, 60 miles NE of Knoxville. There, WEZK's signal improved enough that the station actually picked up new listeners. Even with the improvements, though, there are still areas within Knoxville and Knox county where listeners, unfortunately, still have noisy reception. Also, it was noted that the station's Muzak SCA's (67 and 92 kHz subcarriers) were not noticably affected by the change to CP. The bottom line for WEZK was that the CP project was successful and perhaps economically justified, but nothing very spectacular.

The potential benefits of CP for television broadcasters is much more visible since multipath distortion of a TV signal shows up as ghosting. Thus, more TV stations have embraced CP because it has the potential to significantly improve service without affecting coverage.

As far as the DX'er is concerned, the polarization of a signal arriving via a reflected ionospheric path (E-skip, meteor, auroral, or lightning scatter) is a moot point, as the wave fronts will almost certainly have a different orientation by the time they tickel your antenna. It is possible, by having separate v and h antennas and a means to switch between them, to continuously select the antenna which gives the best signal, and thus reduce the fades which occur during an opening. No doubt this would be useful for those Murphy's Law situations when the station fades just as the ID is being given...

73's
Tim McVey
Route 3, Box 568
Bolivar, TN 38008

Reference: UHF PROPAGATION:
Henry R. Reed & Carl M. Russell,
pp. 221-222;
John Wiley & Sons, NY, 1953

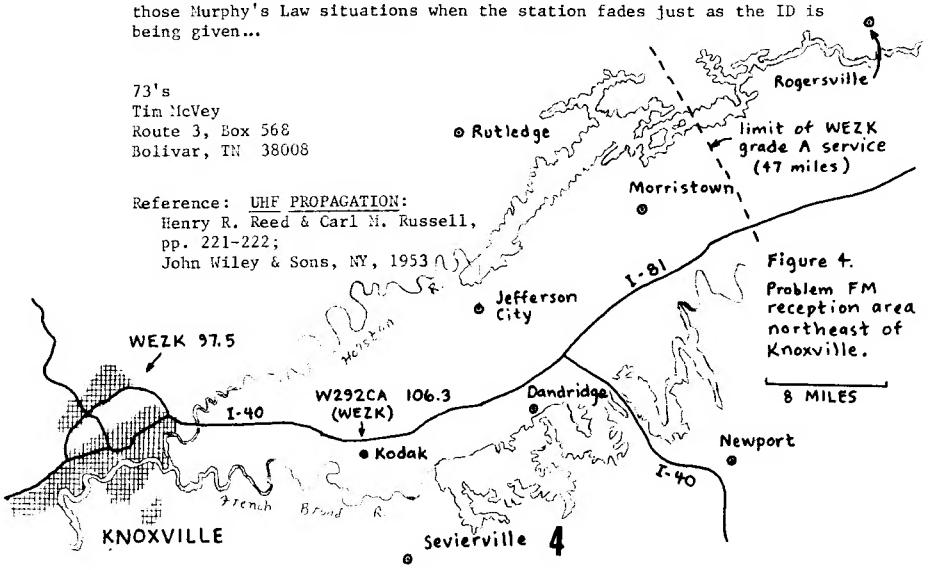
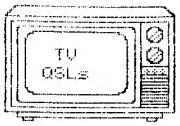


Figure 4. Problem FM reception area northeast of Knoxville.



QSL CORNER

THOMAS J. YINGLING, JR
221 PINEWOOD ROAD, BALTIMORE, MD 21222-2345
PHONE # 301-282-5649

TV QSL's

RI WSTG 64 Providence % 33 Pine St., Rehoboth, MA zip 02769-1406. Coverage-map, bumber-sticker & full data qsl on index card from John McManus, Engineering Superivsor in 2 weeks. (Yingling)

NY W59AT 59 Plainview % WLIG-TV 55 Riverhead, 175 Crossways Park West, Woodbury, NY zip 11797. Letter from Marvin R. Chauvin, VP & GM which now relays WLIG programs. Also send a bumber-sticker & coverage map. (Yingling)

MA WHLL 27 Worcester % 276 Boston Turnpike, Box 27, Shrewsbury, MA zip 01545. Letter & coverage map from Bece Cantu, Promotion Manager in 1 week. He says they are owned by Hill Broadcasting , which also operates WFTY-TV 50 in Wash., DC. (Yingling)

CT WHCT 18 Hartford 18 Garden St., zip 06105. Letter & message pad from Paul A. Rossi, CE in 2 weeks. (Yingling)

MD WKJL 24 Baltimore 4820 Seton Sd., zip 21215. Send back my prepared card after follow-up, signed by Donald E. Elly (?), Operations Supervisor in 3 months. (Holbrook)

NJ WSJT 65 Vineland 4449 N. Delsea Dr., zip 08360. Prepared card signed after follow-up report, signed by Daniel Merle, CE. (Holbrook)

FL WPBT 2 Miami P. O. Box 2, zip 33261-0002. Letter back from Graham R. Simmons, Dir. of Eng. in 1 month. (Holbrook)

FL WBBH 20 Fort Myers 3719 Central Ave, zip 33901. Letter from Howard L. Hoffman, VP & GM in 5 days. (Van Horn)

FL WCJB 20 Gainesville P. O. Box WCJB, zip 32602. Letter plus logo sticker from Michael Sherrill, CE in 18 days. (Van Horn)

FL WIFE 55 Leesburg % 4520 Parkbreeze Court, Orlando, FL zip 32808. Prepared card back from chief engineer, but name is unreadable in 14 days. Also send station promotional material & program schedule. (Van Horn)

NE KNLE 3 Lincoln P. O. Box 83111, zip 65501-3111. Letter, NETV factbook & program guide in 21 days from Kent Steele, Asst. Progran Manager. (Van Horn)

NC WFMY 2 Greensboro Box TV-2, zip 27420. Very nice letter from Mike Conly, Pres. & GM. I have also talked to Mike on the phone at local WTLV ch. 12 in Jax. so send your reports for WLTV ch. 12 to him. He runs both stations. (Van Horn)

NC WJKA 26 Wilmington P. O. Box 2626, zip 28403. Letter from Bob LeClair, CE in 7 days. (Van Horn)

NS CBHT 3 Halifax no address given, letter, qsl card & CBC cloth sticker in 10 days from Brenda Vandervoat, Secretary. (Van Horn)

SC WIS 10 Columbia P. O. Box 367, zip 29202. Letter, prepared card, coverage-map & program schedule from Diane Bagwell, Program/Promtion Manager. (Van Horn)

SC WOLO 25 Columbia no address given, brief note from chief engineer, but name is unreadable. Also send desk cube note pad with station logo on all four sides in 33 days. (Van Horn)

TX KMID 3 Midland P. O. Drawer B, zip 79711. Letter in 14 days from Shorty Stokes, Operations Manager. (Van Horn)

Reporters this time are Hank Holbrook, Larry Van Horn & Tom Yingling, editor. Send in some more qsl items soon, as I'm low again. In the July VUD, the Layout Assoc. used both pages I send in instead of just one for each month. So in your next qsl report, send in any call letters of stations you found will not verify, or you had trouble to verify. Also send in the person you find does the most verifing. Like do you find that the chief engineer will verify more then the general manager, & so on. Read the comments in last month column for more details. 73's

AUGUST 1986

NORTHERN FM·DX

Saul Chernos
P.O. Box 292
Paris, Ontario
Canada N3L3G2

Please forgive the absence of NORTHERN FM DX from these pages for the last few months. The newspaper business is proving to be busy - much more so than I ever expected. Plus, I've moved twice in the last two months. To be fair to everybody, I've given careful thought to the whole spectrum of things. Several things must go and one of them will have to be this column. I haven't been DXing nearly as much as I used to, for a variety of reasons, so this column should go to someone more active in the hobby, itself. My reason for slowing down? Many... FM and TV were worthwhile to DX when I had the entire season to spend DXing. On the one day this June we even HAD skip here (a real winner) I only DXed a bit of the time. Too much else to do; also tired of keeping logs; no longer in Burnt River. Many more. I'll elaborate at end and explain the transition. On to "meagre" rations:

PAUL MOUNT - 471 Emerson Ave. - Teaneck NJ 07666

JULY 1985
29 Tr
0838 WKCI 101.3 CT Hamden ment.morning fog
0839 WDRC 102.9 CT Hartford r
0840 WSNI 104.5 PA Philadelphia r morn.show
0845 WMKR 106.5 MD Baltimore r "K-106"
0847 WSNJ 107.7 NJ Bridgeton local ad
0857 WSBH 95.3 NY Southampton
0858 WLNG 92.1 NY Sag Harbor old r
0900 WFSI 107.9 MD Annapolis g nx
0904 WRCN 103.9 NY "Riverhead-West Hampton Beach" rp legal ID
0905 WEZN 99.9 CT Bridgeport b,solid-no Ocean City
0907 WSLT 106.3 NJ Ocean City lclad,no WHTG
0908 WORQ 102.3 CT Stonington ad in Mystic, wx "patchy fog"
0909 WQHQ 104.7 MD Ocean City-Salisbury "2Q-105" & mention "Delmarva
0911 WMGM 103.7 NJ Atlantic City rp "104MGM"
0913 WLQE 99.3 NJ Pleasantville r "Lucky99WLQE"
0915 unID 97.3 ethnic language, MA New Bedfd?
0916 WWOC 94.3 NJ Avalon b ad for Stone Harbor

I've had DX to report before & after this monster Tropo day, but it's written down elsewhere. The above noted while driving from Fairfield to Whippant NJ, then in parking lot in Whippany. Car receiver is a Blaupunkt Aspen SQR24 carstereo. Wx forecasts mentioned 100% humidity that morning. This was an interesting session as both the Jersey-Delmarva and CT shore, plus some inland stuff (Baltimore, DC) was heard. Unfortunately, none of this is countable in my Teaneck log. Having 6 presets in car radio sure helps. Was neat to not hear WFAS 103.9, WHTG 106.3, WSUS,& WBAB 102.3, WJLK 94.3 in favor of something further. WORQ was the real surprise as it's needed in Teaneck, 30 miles closer to CT. Wanted to try every channel before going to work. Also noted 99.5 classical, plus Z-100.3 & WCBS running 2nd on their channels; 93.3 not WMMR, 103.3 classical. Bob Smolarek had noted similar cx at midnight and Joe Fela at 0300, and Hillary Kane in Brooklyn all night. I then went to my 3rd floor office and listened to WMKR on an ordinary table radio till they faded out at 1030, to the amazement of my co-workers..

ERIC FADER - NEW ADDRESS - 3220 Netherland Ave. - Apt.3G - Riverdale NY 10463

FEB 7 1986 GW-Tr
1305 WFGB 89.7 NY Kingston directional away from me.
MARCH 1986 (17 GW-Tr)
0110 WPSTt103.1 NJ ??? unknown new xltr in northern NJ
APRIL 1986
1 Tr (cold front approaching)
1935 WYFI 99.7 VA Norfolk g
1959 WFOG 92.9 VA Suffolk
2001 WESR 103.3 VA Onley-Onancock QTH change, mentioned heavy coastal fog
2013 WGMS 100.5 VA Norfolk
2013 WSRS 96.1 MA Worcester o/WGCB-PA
2020 Philadelphia PA regulars very strong
2043 WNRN 94.9 VA Virginia Bch
2057 WNVZ 104.5 VA Norfolk
2203 WHTT 103.3 MA Boston sudden, o/WESR-VA
2206 WBOS 92.9 MA Boston solid
2213 WFNX 101.7 MA Lynn, other usual Bostons
2216 WOKQ 97.5 NH Dover
2335 CBHM 106.5 NS Middleton A SHOCKER as I was expecting Richmond VA. With "CBC Nightcap", solid 9dB signal till 0001 deep fade. Resurfaced weakly for mention of NS and s-off with O' Canada at 0111 (Apr 2). 1st NS on FM (I've had Halifax TV-3) 515 miles!

APRIL 2 Tr
0015 WHOM 94.9 NH MtWashington very strong at 27dB
0024 WEBI 92.1 ME Sanford r
0106 WMHT 89.1 NY Schenectady between WNYU s-off and WFDU s-on
0110 WGNA 107.7 NY Albany; also WPYX 106.5
0118 WJJB 97.7 NY Hyde Park Most-wanted unheard w/ "98-Fame"
0123 WAFL 97.7 DE Milford still in despite change in opening's direction.
0136 WCGY 93.7 MA Lawrence o/CT local
0202 WYNZ 100.9 ME Westbrook-Portland "Y-101"
0213 WICO 94.3 MD Salisbury
0750 NY(Long Island)CT,MA tropo, esp. Cape stations (94.9...)
1215 WVOF 88.5 CT Fairfield 10 watts!
15 Tr
minor general Tr despite rain & low pressure.

Equipment: Onkyo T-9090 w/ rabbit ears.

(ERIC, I've saved your pirate stuff to run separately - saul)

Re the address change above...I'm getting married June 15 to Janet (CONGRATULATIONS!) to whom I've been explaining Tr, Es to the extent that her patience holds up. (Cont'd over)

I've changed jobs, too, for a total lifestyle switch. I'm now a White Plains lawyer after a few years as a Manhattan lawyer, so I should have work hours more conducive to DXing (as well as to married life). (Ed note: I can see it now, your client in middle of cross-examination, evidence mounts, death sentence seems likely, Es opening hits suddenly, MUF soars ... you can imagine the rest. -ed).
A further note to CBHM Tr April 1-2...The day's wx maps clearly show not only the approaching NE-SW cold front that caused the whole opening, but a little lid representing a warm front just above Nova Scotia, pushing down towards NY and New England. A rare combination of events causing a classic opening.

Some corrections and comments to my last report "as printed" in the FEBRUARY 1986 VUD:

(1) My SEPT 1985 30th Tr logging of WAEV GA 97.3 was DEFINITELY TROPO. Steve West of PA had Savannah and other southern GA via Tr that night. Es at 0230 on Sept 30 would be more than just freak. Also I can tell the difference after 11 years of DXing FM. What's interesting about this was the Satellite wx map for that day and the day before - the frontal line along which WAEV's signal rode up to me is very clear, as is the pattern, a rare one, of frontal systems which enabled me to log WCIK 103.1 NY and WDNH 95.3 PA the next day. (Order in the court, order in the court, ... Eric, your evidence as above and your tape prove you most likely did have it by Tropo. Thanks for the tape, enjoyed $9 as well. As soon as things are settled here I'll get you a sample of Canadian pirates. Funny, I've got a few I'm not sure are MS or Es and once I found out a MS was in fact Es about two years after the fact! Then there was the time I had KY on Tr and FL on Es. I've also had an opening where the only two states I had were FL and KY...both Es...can screw up a fragile mind!-saul).
(2) Re Oct 26 Pirate... One of us - I suspect you, hi!) screwed up my loggings of WHOT and WFUN. (I've since discarded the original loggings so we'll never know. Whatever the case what follows is a correction, what's known in newspaper circles as "the truth" (no comment about legal circles, hi!)-saul): WHOT's DJ is Pete Sake. He does NOT have a terribly accented Brooklynese voice - that was a description of WFUN DJ Neil Down (get it?) (yes, my QSL from their AM station says Kneel Downe, I believe). WHOT was 91.5, WFUN was 91.9. Also, WHOT has never called itself the fun radio station - only WFUN has - so your comment that WHOT and WFUN are the same (next to my Nov 16 log of WFUN) is erroneous. WFUN and WHOT have different locations, different signals, different DJs and have been on at the same time.
(3) Re your comment about NINE-FM not being on anymore, I think I sent in a report last month, right? It was on about 6 times last month. (If you heard it, I guess so. I remember them (Ed Armstrong) saying (I believe I heard it on another pirate - KPRC maybe) that he was "going on to bigger and better things" and leaving his station. I guess he changed his mind. I've also heard this elsewhere and I see you got them in March. Glad to have 'em back on the pirate scene.-saul)

ALSO...(AND TAKE NOTE, GRAND RAPIDS MI DXer who requested this info awhile back), the ONKYO T-9090 - a tuner not a receiver (hence the "T")...If the Grand Rapids DXer writes to Onkyo he can get a product booklet listing all Onkyo equipment with specs. WHAT IS MORE IMPORTANT TO NOTE IS THAT... ONLY THE ONKYO T-9090 TUNER IS RECOMMENDED. ALL OTHER ONKYO PRODUCTS ARE UNSUITABLE FOR DX'ING!! A look at the specs will bear this out. See Technical Topics in the FEB '86 VUD p.31, at the bottom of the page. Most Onkyo receivers (and tuners other than the T-9090) have alternate channel selectivity of 55 or 60 dB. The T9090 has ADJACENT channel selectivity of over 40 dB. The GRAND RAPIDS DXER is directed to the July '85 issue of STEREOPHILE Magazine - referred to in an FM News column in the VUD around last Sept) which has an article comparing the T-9090, the Carver TX-11, Mac MR-78 and MR-80, a Luxman rx and a few others. The Onkyo is rated only second to the Mac for relevant FM DXing specs - better than the Carver. The Tandberg (note spelling) is not in the ballpark. I've never used a TX-11, but cannot believe it's any better than the Onkyo's features, too. (dB indicator, 20 pre-sets, automatic computer-controlled bandwidth and other functions) make it a phenomenal machine. (Ed: The May VUD, I believe, also had an article about the Onkyo T-9090). (Thanks, Eric, for your generous answer to the DXer's questions. -Saul)

SCOTT HOOD - Dean Jr. College, Box 971 - Franklin MA 02038-1994

JAN 1986
6 Au(?)
1955 unID 101.1 ? ? r "Q-101" see notes.
8 Au (With the 5-band)
1840 WAZU 102.9 OH Springfield r "FM-103", calls sounded like "WAZE ?, Springf'd wx 670
1900 WFURt102.9 MI Grand Rapids b "You're listening to 102.9..." (Ed: You can only guess)
12 GW-Tr
1250 WNEF 106.3 RI off-air, testing w/ reduced power at 2355.
13 GW-Tr
0710 WNCK 106.3 RI Woonsocket r "The new Wink-106.3-FM". On with full power, but more prone to fades; different xmtr QTH?

NOTES: Logged my first-ever Auroral DX. In regards to "Q-101", I first thought Falmouth MA was on the air and that WGIR NH was just washing it out. But after the confirmed Au opening two days later, I've had second thoughts. Ancr was female, with "soft rock" well enunciated. Is it CHEQ? (Could be, they're "Q-101" almost exclusively using call letters, but you can only guess. Try again!-Saul) Funny thing was that it was strong enough to receive on the boombox. (More comments next page over)

As for the Jan 8 Au opening, I was walking back from supper when I noticed a bow-tie shaped red-ish coloured cloud in the night sky. I thought it was the last reflection of the sunset. (As long as it wasn't mushroom shaped, in which case I'd advise all WTFDA members and anyone else to head for the nearest shelter even if the DX setup is elsewhere-saul). Then I remembered the weatherman talking a few days ago about a big solar flare and the possibility of Northern Lights (Aurora Borealis). I put 2 and 2 together, came up with 5 (I hope you're enrolled in an arts program), and literally ran to my room, turned on the TV, and, voilà, several interwoven weak offsets (hash) on TV 2-6. Unfortunately, the over-sensitive and under-selective 5-band limited my options to 102.9, which itself was hampered by an elevated CT. As for WFUR-MI, my 1984 Yearbook shows only this as b (I had suspected WYFM-PA but list says top-40). (Ed: A 1984 Yearbook is seriously outdated in 1986; besides, guessing is risky; keep it tentative. WYFM is top-40. I wonder how wide the opening was.
Other then that, things have been quiet, although I think the worst of the doldrums may be over. In the past few weeks (this report received around Feb or Mar) I've logged NYC a few times, WUSL twice tentatively, and CT was elevated several times. As for Wink-106, it is a big improvement over the former "Stardust-106" mush. I've started my internship at "Magic 106.7-WMJX" in Boston. I'm working under the production director (I wanted programming, but, eh, I'm also hung up on signal processing (compression, phasing/flanging (like WKCG-ME) and they have the most state of the art equipment of any production studio in town, so I figure I can hack around with that in my spare time. 73's, Scott.
P.S. Why don't you incorporate format abbrevs etc... into your column masthead, or is that too much of a pain in the ——? (I'm working on a masthead that will do just that and also list the territory this column covers, etc... which I'll run a few times each year-saul)

MIKE BUGAJ - 69 Sherman Road - Enfield CT 06082 (Carver TX-11,Finco FM-5 w/rotor)

NOV 29 1985 Au
1900 heavy Au, no IDs, last time I have used my ST-5130
DEC 1985
1 Tr
1320 CBF 104.3 PQ Trois Rivières FF
1650 WABK 104.3 ME Gardiner r
1820 WBGW 97.1 ME Bangor k
3 GW
2155 W218..91.5 CT Hamden xltr of WJMJ 88.9, at 50 mi, always heard unless covered up by WNYE NYC.
10 GW
2115 WTBR 89.7 MA Pittsfield r here from 89.5
13 MS
2118 WRMN 99.7 GA Atlanta "warm 99" new mode
2119 WIMI 99.7 MI Ironwood "99-7, WIMI..."
JAN 1986
7 GW Pirate see PIRATE report at end of this column or in a future one, depending on space.
22 GW
1725 WBPV 90.1 MA Charlton This one seems to rebroadcast WCUW 91.3, IDs and all. mono.
FEB 1986
7 Au strong at 1700, no IDs.
19 Tr
2250 WKXL 102.3 NH Concord r
2255 WEVO 89.1 NH Concord
25 Tr (WXLO off for few days)
1718 CFLG 104.5 ON Cornwall

COMMENTS:
My totals right now stand at 1256 logged. My Carver faced its first major Tropo opening of 1986 on April 1 and did a great job of pulling out some good DX. If I'd been using my old Sony 5130, I would have missed all of my new loggings due to poor selectivity (and the Sony's alt. channel selectivity was 100dB). A few months ago, somebody was asking about a good FM DX receiver. The TX-11 IS a good one. I've seen it selling for $490 in a local discount chain store. Also the Onkyo T-9090 is going for $499 ($500 -saul) in the same store. Now, supposedly, the Onkyo tuner is another hot DX receiver but so far I haven't seen anyone hook it up to an outdoor fringe antenna and report the results. Anyway, the TX-11 has opened up many more DX channels which were previously totally unusable. I'm happy with it. Note: in the Apr 1 opening, most signal strengths were better than 60dB).

MARCH 1986
22 GW
0300 WVOF 88.5 CT Fairfield Italian (?) rx Easter program
29 Tr
0840 WKPQ 105.3 NY Hornell "Power 105"
31 Tr
2223 WQCB 106.5 ME Brewer "Q-106.5" k new to air?
APRIL 1 1986 SUPER COASTAL TROPO
1800 WMRN 94.9 VA Virginia Beach b
1800 WWOK 105.7 NC Columbia
1803 WXRI 105.3 VA Norfolk g
1803 WOLC 102.5 MD Princess Anne g
1823 WKEZ 94.1 VA Yorktown country hits
1827 WOFM 92.1 VA Moyock "Magic 92"
1830 WFOG 92.9 VA Suffolk "FM-93"
1840 WNVZ 104.5 VA Norfolk r "Z-104"
1840 WKXW 101.5 NJ Trenton "Kix 101½"
1850 WBXB 100.1 NC Edenton k (nice catch-saul)
1901 WKHI 99.9 MD Ocean City r
1925 WAFL 97.7 DE Milford soft rock
1945 WKYZ 105.5 MD Salisbury b "FM-106"
2003 WGMD 92.7 DE Rehoboth Beach
2018 WNNT 100.9 VA Warsaw k s-off at 2200
2100 WWFM 89.1 NJ Trenton ID, s-off?
2128 WRFK 106.5 VA Richmond concert
2135 WWDE 101.3 VA Hampton ""-WDE" thru null of "KC-101".
2150 WSEA 93.5 DE Goergetown r
2235 WASH 97.1; WGMS 103.5 concert (both DC)
2240 WBSB 104.3 MD Baltimore r "B-104"
2245 WEXV 99.3 NY Ellenville
2308 WOVU 101.7 VA Killmarnock
2326 WRQX 107.3 DC Washington "Q-107"

(four very short reports remain, if more received in a few days, I'll use this month.)

SCOTT HOOD sends another report

FEB 1986
19 Tr (storm related)
2240 WALK 97.5 NY Patchogue $ strong
2240 CT in $ strong (WKCI not $ - why?)
20 Tr
2010 WIHS 104.9 CT Middletown 76
2210 WSPK 104.7 NY Poughkeepsie 131
2225 WLKZ 104.9 NH Wolfeboro 110
MARCH 1986
29 Tr
0040-on CT, WALK 97.5 in $ strong, WLYT 92.5 & WCGY 93.7 demolished)
2345 CT elevated (WLYT,WCGY again demo'd)
2355 WMVY 92.7 MA Tisbury 61
2355 WLNG 92.1 NY Sag Harbor 130
30 Tr
0045 Cape Cod MA elevated (WXJY 96.3 $)
APRIL 1986
1 Tr (Oct 24 cont'd, no FOOLing)
0905 WKHI 99.9 MD Ocean City 375
1825 WCMS 100.5 VA Norfolk $trong 480
1825 WUSL 98.9 PA Philadelphia 250
1825 WNOR 98.7 VA Norfolk $trong 480
1830 WKDN 106.9 NJ Camden 245
1830 WTID 106.9 VA Suffolk 490
1840 WXRI 105.3 VA Portsmouth 480
1840 MA Cape Cod in $trong
1845 WOWI 102.9 VA Norfolk 480
1905 WBAZ 101.7 NY Southold oldies, 88
adult contemp., ""Light-FM" (NYC $trong) 88
1910 WWDE 101.3 VA Hampton r "2-W-D" 480
1910 WYFI 99.7 VA Norfolk g (Philly $ 480
1940 WXPK 92.3 NY N.Y.C. pr 168
1940 WLNG 92.1 NY Sag Harbor 130
1940 WLIR 92.7 NY Garden City 147
1945 WXTU 92.5 PA Philadelphia k 250
1945 WFOG 92.9 VA Suffolk b 490
2010 WDSD 94.7 DE Dover k 300
2010 WAYV 95.1 NJ Atlantic City 250
2025 WZZO 95.1 PA Bethlehem 230
2120 WJBR 99.5 DE Wilmington r "Bright-99-5" $trong at 2245 275
2130 WNBR 100.7 NJ Wildwood r (&WALK97.5)285
2135 WSNJ 107.7 NJ Bridgeton k $trong 275
2155 WBEYt103.1 MD Grasonville k 335
2200 WSPK 104.7 NY Poughkeepsie 131
2245 WPST 97.5 NJ Trenton ($trong) 220
2250 WKHI 99.9 MD Ocean City 375
2300 WMGM 103.7 NJ Atlantic City 250
2300 WEBE 107.9 CT Westport r "Weebee-108"159
2300 WKRE 107.5 VA Exmore k "K-108" 415
2 Tr Fog reported all down coast;none here
0005 WBYO 107.5 PA Boyertown g 250
0135 WAWZ 99.1 NJ Zarephath 195
0145 WSTW 93.7 DE Wilmington r 275
0220 WQHQ 104.7 MD Ocean City "Q-105" now 330
0220 Portland ME $trong; 0245 Augusta ME same
0255 WMGQ 98.3 NJ New Brunswick r 195
0325 WHUD 100.7 NY Peekskill 142
0330 WMJY 107.1 NJ Long Branch r "Y-107" 185
0335 WJRZt 100.1 NJ Manahawkin 270
0350 NYC,Philly,CT still in $trong. To bed!
0825 airwaves back to normal, CT elevated...
3 Tr
2340 WLNG 92.1 NY Sag Harbor 130
2350 WALK 97.5,WCIB 101.9, CT - $trong

APRIL 4 Tr
0020 98.9 WUSL PA Philadelphia 250
0820 CT NYC $trong
0825 WLNG 92.1 NY Sag Harbor 130
16 Tr
2015 MA Cape Cod in $trong
20 Tr (pre-storm or seabreeze induced)
1915 Portland ME, WKCG 101.3 in
1935 WOKQ 97.5 in $trong
1950 Cape Cod MA in or near $trength
21 Tr
0205 WWHB 107.1 NY Hampton Bays 105
0235 WBAZ 101.7 NY Southold 88
28 Tr (WCRB 102.5 off-air) EDT time starts
0040 WBQX 102.7 VT Manchester 113
0115 WUUU 102.5 NY Rome "Light hits" r 220
0135 WAWZ 99.1 NJ Zarephath 195
2130 WLNG 92.1 NY Sag Harbor 130
29 Tr (fog bank off New England coast & eastern Long Island)
0020 WWHB 107.1 NY Hampton Bays 105
0025 NY Albany (in for 1st time in ages)
0045 WRCN 103.9 NY Riverhead
0045 WKNE 103.7 NH Keene nr $trong (WERIoff)
0055 WBAZ 101.7 NY Southold 88
0115 WUSL 98.9 PA Philadelphia 250
MAY 1986
1 Tr (fog-related, none here at all)
0855 CT Cape Cod MA in, near $trong
0855 WLNG 92.1 NY Sag Harbor 130
0915 WUSLt 98.9 PA Philadelphia 250
10 Es FINALLY!)
1035 WXBM 102.7 FL Milton k Pensacola QTH1225
1040 WPMO 99.1 MS Pascagoula 1300
1040 WQIK 99.1 FL Jacksonville 1050/ 1100
1045 WBAM 98.9 AL Montgomery r "99FM" CLTime
1045 WKYD 98.1 AL Andalusia 1175
1100 WKRG 99.9 AL Mobile 1275
1100 WQID 93.7 MS Biloxi 1325
1105 WKSJ 94.9 AL Mobile 1275
1115 WLTB 99.5 AL Birmingham 1075
1115 WRNO 99.5 LA New Orleans 1400
1115 KTDY 99.9 LA Lafayette r 1475
1120 WNOE 101.1 LA New Orleans k "Hit country"
1120 WABB 97.5 AL Mobile 1275/ 1400
1135 WMSI 102.9 MS Jackson k "Miss-103" 1300
1140 KRRV 100.3 LA Alexandria 1450
1145 WBAQ 97.9 MS Greenville b 1275
1155 KNOE 101.9 LA Monroe r "FM-102" 1375
1205 #%&$&#*!!, have to leave
1405 MUF TV-4
11 Tr
0020 CT, WOKQ 97.5, WGAN 102.9, in $trong
14 Tr (storm related)
2250 WALK 97.5 NY Patchogue $trong
2300 WLNG 92.1 NY Sag Harbor 130
15 Tr
0105 tent WUSL Philly;0115 WBAZ NY South'd 88
16 Tr
0105 Cape Cod MA in $trong
0110 WAWZt 99.1 NJ Zarephath 195
0885 WLNG 92.1 NY Sag Harbor 130
17 Es
2005 WKSJ 94.9 AL Mobile 1325
18 Tr
0335 WKSZt 100.3 PA Media 255

(see next page)

More Scott Hood

MAY 19 1986 Tr
0135 WUSL & WAWZ)
20 Tr
0240 CT in $trong & WALK, too
0245 WUSL 98.9 PA Philly 250
0845 WUSL 98.9 PA Philly 250
1305 BYE Franklin!
FINAL STATS:
Tr 212 plus 3 tentatives for 215
Es 52 plus 14 t's for 66
MS 0
Au 1 plus 1 t for 2
TOTAL : 265 plus 18 t's for 283

COMMENTS:
Things are finally picking up. The big Tr opening on April Fool's Day was quite a pleasant surprise. VA was in until after 2200. Unfortunately it was only a one night stand. Shows just how potent sea fog can get. Other than that one night, Philly hasn't really made any widespread invasions.
The Es season has roared in rather nicely.
This is the last report from FRANKLIN...I'm packing up & leaving. Now I'll have to live off the pitiful Tr in BEVERLY. At least the Es are just as good there.
MY NEW ADDRESS IS: 7 Auburn Rd., Beverly MA 01915-2501.

BILL NOLLMAN - BOX 184 RFD #1 - BOZRAH CT 06334

MAY 1986
10 Es
1247 KABF 88.3 AR Little Rock 1180
1253 WAAC 92.9 GA Valdosta "Country 93" 975
1258 KTTS 94.7 MO Springfield 1170
1322 KRXL 94.5 MO Kirksville "XL-94" 1075
1325 KSHE 97.7 MO Crestwood "K-She" 975
1339 KGRC 92.9 MO Hannibal "92-FM" 1025
17 Es
1938 WMEZ 94.1 FL Pensacola 1150
1939 WXBM 102.7 FL Pensacola 1150
1948 WTYX 94.7 MS Jackson "94-Tix" 1200
2011 WJMI 99.7 MS Jackson 1200
2028 WCPC 93,3 MS Houston 1040
21 Es
1120 WKQD 93.3 TN Tullahoma 890
25 Es
1045 WTNF 94.9 FL Tampa
1048 WINK 96.9 FL Ft Myers
1051 WKGR 98.7 FL Ft Pierce
1056 WCVU 94.5 FL Naples "Seaview"
1059 WVFM 94.1 FL Lakeland
1118 WNLT 95.7 FL Clearwater "W-Light"
1119 WHOO 96.5 FL Orlando
1128 WWBA 107.3 FL St Petersburg
1153 WRBQ 104.7 FL Tampa "Q-105"
1155 WHOO,WYNF,WVFM,WPDS at full signal strength in perfect $tereo

May 25 Es cont'd
1155 WPDS 93.3 FL Tampa
1213 WFSU 91.5 FL Tallahassee
1218 WJST 94.5 FL Pt St Joe "T-94"
1229 WLCS 96.1 FL Jacksonville "Class 96.1"
1241 WMNX 95.9 FL Tallahassee
1248 WQPD 94.3 FL Lake City
1256 WJMI 96.3 MS Jackson
1309 WOUS? 99.5 AL Birmingham "Birm.Light FM"
1319 WTUG 92.7 AL Tuscaloosa
1323 WFFX 95.7 AL Tuscaloosa "Fox 96"
1324 WOMD??95.7 ?????????
1326 WTYX 94.7 MS Jackson
1331 ???? 96.3 MS Jackson "New 96.3 FM"
(You had 'em earlier at 1256 & a relog)
1335 ???? 92.7 "B-93" k ?????
1343 WBAD 94.3 MS Leland
1347 WQKZ 96.7 TN Bolivar "KZ-97"
1352 WZKS 96.3 TN Murfreesboro
1410 KLRS 92.7 MO Mountain Grove
1416 KTTS 94.7 MO Springfield
25 Tr
1412 WFPG 96.9 NJ Atlantic City
1420 WFME 94.7 NJ Newark
1428 WMMR 93.3 PA Philadelphia

COMMENTS: It's been awhile but finally school is over and I have my degree in electronics and the Es rolling in like never before (and never again by the likes of things here)(-saul).
A temporary job at WFSB TV-3 has given me the mornings and early afternoons off - coincidentally a great time to look for an opening. After a 13-page term paper on ionospheric propagation, I finally have a great understanding of our super hobby. (So when and where will the next opening be-s)(That editorial comment shows I have a 1-ousy understanding about the hobby-s).
First I attack the 30-50 MHz band (visions of Ronbo-s) while keeping my eye on TV-2. When TV-4 acts up the FM gets warmed up. As you can see, it's working pretty good. I hope the Es keep up this way for a while and I have more to report soon. The receiver is the same Realistic STA740 but the October hurricane took my super CM crossfire antenna. Now, with the CM 1110, things aren't quite what they used to be, especially the locals. What can you do?! The 25th the best Es opening I've ever seen.

BOB ZENT - 1835 Fruit St. - Huntingdon IN 46750

OCT 1985
3 Tr
0959 WRVU 91.1 TN Nashville
NOV 1985
21 Tr
2000 WFUM 91.1 MI Flint new-to-air, satelite of WUOM 91.7 MI

Nov 22 GW-Tr
1859 WQTZ 92.7 IN Decatur new xmtr site & increased coverage. 29
Dec 14 MS
2221 WNOE 101.1 LA New Orleans "information from all over LA on hit country 101" 790

(Cont'd next page...)

BOB ZENT cont'd

JAN 1986
15 Tr
1305 WPXN 104.9 IL Paxton 135
16 GW-Tr
0046 WOUS 93.5 IN Lafayette (ex-92.7) 80
0101 WZWZ 92.7 IN Kokoma (ex-93.5) 45
0114 WWWO 93.5 IN Hartford City (ex-104.9)30
0600 WOKZ 104.9 IN Muncie s-on (new stn) 48

FEB 1986
10 Tr /125
1330 WOVB 103.1 IN Versailles (local 103.1 Off)
18 Tr
1318 WSAK 106.3 IL Sullivan PSA ads 180
1335 KTMO 98.9 MO Kennett wx 410
1343 KJEZ 95.5 MO Poplar Bluff calls 390
1401 KWOC 94.5 MO Poplar Bluff ID 390

ALAIN PEPIN - 234 Rue Montcalm - St Jean Sur Richelieu - QUEBEC J3B 3N8

MAY 1986 - 10 Es
1225 WTYX 94.7 MS Jackson "J's hot FM94 Tix"
1227 WQNZ 95.1 MS Natchez "95 country WQNZ"
1230 WTVY 95.5 AL Dothan ID TC
1232 WYYNt 96.3 MS Jackson area ad "96.3 FM"
1242 WKGC 90.7 FL Panama City stn info
1250 WVAS 90.7 AL Montgomery 25000 watts, Westwood I net prgm. Countdown. ID
1254 WRAS 88.5 GA Atlanta ABD Direction network; "Album 88"
1255 WRFG 89.3 GA Atlanta blues ID
1256 WLWI 92.3 AL Montgomery k TC ID
1330 KABF 88.3 AR Little Rock
COMMENTS: My receiver is a 1976 Lloyds $tereo and antenna your average thing on a roof with a rotor.
(I left out your kilometric distances because I thought it might confuse the page. Anarc will be a last minute decision - litemally! TV sent to the TV editor.-Saul)

HARRY J. HAYES - 9 Henry St. - Wilkes Barre PA 18702

MAY 1986
9 Es
2107 unID 94.7 NF r (R.Oz?)
10 Es
1016 WEZB 97.1 LA New Orleans
1024 WLTS 105.3 (LA Slidell suspect)
1027 WAKH 105.7 MS McComb
MUF to 107.9 several deep
1040 KRRV 100.3 LA Alexandria
1042 WIRK 107.9 FL W.Palm Bch (No calls)
1043 WPFM 107.9 FL Panama City(heard)
1049 KBIU 103.7 LA Lake Charles
1054 WPCV 97.5 FL Winter Haven
1056 WQNZ 95.1 MS Natchez
1101 WJST 94.5 FL Port St. Joe
1104 KITT 93.7 WHO IS THIS?????
1105 WPAP 92.5 FL Panama City
1109 KWKH 94.5 LA Shreveport
1111 KYKZ 96.1 LA Lake Charles

May 10 Es cont'd
1120 KILT 100.3 TX Houston
1125 KNOE 101.9 LA Monroe No calls heard
1132 KXKZ 107.5 LA Ruston No calls; "Z-107"
1139 KKDA 104.5 TX Dallas
1140 WZZK 104.7 AL Birmingham
1143 KVIL 103.7 TX Dallas
1147 KEGL 97.1 TX Dallas
1149 KLTY 94.9 TX Arlington
1151 KPLX 99.5 TX Dallas
1153 KXCL 107.9 TX Corsicana No calls heard
1155 KIXK 106.1 TX Denton
1157 KQZY 105.3 TX Dallas (ex-KOAX)
1209 KLUP 97.9 OK Poteau No calls, ment. Ft. Smith
1215 KTCS 99.9 AR Ft. Smith
1223 KTUX 98.9 TX Carthage
1232 KCWD 96.7 AR Harrison
1245 KXXY 96.1 OK Oklahoma City
1247 KEBC 94.7 OK Oklahoma City

COMMENTS: Equipment: consists of a Sony ICF 2001, Radio Shack rabbit ears and amp. w/ Radio Shack tuneable attenuator for overload.
Looks like a banner season shaping up (hahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahahaaaaaaaaaggghhhhhhrrrrrr!-Saul). An FM opening of the magnitude of May 10 has never been experienced here this early in the season; in fact such an opening has not been seen here in years. Visions of the mid-'70s have come to pass; let's hope it lasts. The weekend of May 17-18 is showing signs of intense Es on lower TV channels. It is midday, Sunday as I write this. I wouldn't be surprised if another FM opening happens before the weekend is out. Tune in next time for the answer. (How about Es before the summer is out?-S)

ROGER WINSOR - 302 W. John - Champaign IL 61820

Hello all from east-central IL. Not much happening on the FM band. In case you hear jazz on 90.9 Saturday PM, it could be WILL. Otherwise classical 91 and NPR stuff. They play the same tapes over & over. Locally, if you ever get WEFT 90.1 you have a DX plum. They are 250 watts presently w/ problems of intermod w/a private firm. Present tower is 140', on a building atop the Nt'l Academy of Arts. WRXR 95.5 IL Chicago w/ r noticed May 10 in morning. Usual Chicago-Indianapolis-StLouis stuff. WSIE 88.7 has done something as they are regular w/WPCD off. While thru Kankakee, nothing yet on 92.7.
Overload is a big problem at this QTH. Only WBGL is not close - within 2 miles. All the rest are ½ - 1 mile away. WLRW 94.5 has new owner but same format g with s on weekend. No 100% soul in Champaign. WRBZ & WRTL Rantoul ID as Rantoul C-U., but FM is not strong & is bothered by WPZQ 95.1, a station that seems to go nowhere. WKIO 103.9 is all over the dial from from 92.5 up.
Only Es seen here, briefly on TV-2 one day last week (this report dated May 18-S), but weak. Es just isn't like it used to be in the '50s. I started in 1954 & remember seeing... (TURN...)

KMID-2 for days straight with their TP in June. (Roger, nothing is like it was back in the good old days. Movies. TV. Baseball. Ice Cream. The family. The environment. It figures I was born in 1961.-S).
Both WPCD 88.7 & WEIU 88.9 are off until Summer session begins in June. WVJS 89.1 still on w/ r - gives calls most of the time, ex- "The college station". Nothing on 91.3 either from Terre Haute IN. I get lots of Tr there so I should hear it. Good DX to all. -Roger.

ANOTHER REPORT FROM ROGER:

JUNE 11 1986 Es INTENSE
To ND, SD, MT, WY - all new states.
All WY stns heard from 5-7:30 pm fade-out.
The following IDed:

KYYZ	96.1	ND	Williston		
KBHA	91.3	ND	Four Bears		
KMPR	89.9	ND	Minot		
KIZZ	93.7	ND	Minot "Z-94"		
KCND	90.3	ND	Bismarck		
KYYY	92.9	ND	Bismarck "Y-93"		
KBYZ	96.5	ND	Bismarck		
KEZV	101.1	SD	Spearfish b		
KRCS	93.1	SD	Sturgis		
KBHE	89.3	SD	Rapid City		
KKLS	93.9	SD	Rapid City r		
KVSR	97.9	SD	Rapid City g		
KSQY	95.1	SD	Deadwood "K-Sky" r		
KCCH	93.1	MT	Sidney "CH-93"		
KSDY	95.1	MT	Sidney k		
KCGM	95.7	MT	Scobey k		
KMCM	92.5	MT	Miles City MT nx		
KYYA	93.1	MT	Billings r "Y-93"		
KLZY	92.5	WY	Powell r (in for 1 hr!)		
KTAG	97.9	WY	Cody great level		
KENB	96.1	WY	Worland b great level		
KROE	94.9	WY	Sheridan great level		
KLWD	96.5	WY	Sheridan best catch		
KLGT	92.7	WY	Buffalo 25'tower o/WMLA		

COMMENTS: MUF seemed to be 101.1 briefly. 24 new stations in 2 hours. Rx is GE Superadio II w/dipole & nothing more. Much cross-modulation in this town at my downtown location prevented 97.1 logging of KHHT & KZLS & 96.9 KOLL. TV-2 was a dog-fight between KTWO & KTVQ & TV-5 KIVV-SD was in for 2-plus hours. About time for Es; first good opening I caught so far. I hope to be at Jamestown this year. (See you and all others there. Be there or be square-S) 73s Roger.

FRED R. VOBBE - 706 MacKenzie Ave. - Lima OHIO 45805-1835

Hope your weather is better than ours. We just experienced our first spell of bad wx here. A tornado touched down in the next county to the west. I could see it on the TV's wx radar. Not too cool! We are now up to full power at WLIO-TV (for several months) with 661,000 watts ERP. Judging from semi-distant reception reports - 60 miles away - we are doing a lot better. In Sidney, OH, we upped our signal strength by 28dB. The new antenna is an RCA TFU-30JA with ½° beam tilt. Frank Merrill saw us over in Macomb IL so we must be doing OK. We'll begin $tereo prgmg May 1 with NBC. Best to all and hope to be doing some FM-TV DX if conditions are right and I get the new antenna up. 73, Fred.

BRUCE F. ELVING - 241 Anderson Rd. - Esko MN 55733-9413 Times CDT

SEPT 1985
18 Tr
0703 KQRN 107.3 SD Mitchell
19 Tr
0700 KJKJ 107.5 ND Grand Forks (took tricky rotating to avoid KLIZ MN Brainerd 107.5)
20 Tr
0708 KMSR 94.3 MN Sauk Centre
0814 KDOM 94.3 MN Windom
26 Tr /XMTR)
0800 WIRR 90.9 MN Hibbing-Virginia (Buhl
OCT 1986
21 Tr
2158 WJJQ 92.7 WI Tomahawk
DEC 1985
7 Tr
1200 WIMK 93.1 MI Iron Mtn (lcl 92.9 WSCD on low power)

COMMENTS: Little time to DX, what with putting out the FM ATLAS and trying to nail down formats and slogans, but the DX seems to be there when I try for it. Can't complain about reception. 73ily, Bruce.

JAN 1986
19 Tr
1500 WYTE 96.7 WI Whiting (town has no zip code & letters always returned; can't write them!!!!!)
FEB 1986
3 Tr
0800 KBHW 99.5 MN International Falls $ g
5 Tr
2002 KFAI 90.3 MN Minneapolis $ rare sandwiched in between two area stns.
6 Tr
1300 K244AZ MN Sartell legal ID, St. Cloud QTH given instead of Sartell
8 Au
1900 WVPE 88.1 IN Elkhart quite clear w/ Prairie Home Companion from American Public Radio & ment. of underwriters.
APR 2 Tr 1986
0900 WGNV 88.5 WI Milladore a new g (Christian) stn w/ interestingly varied mx & prgms. Not predictable like most g stns. $tereo, usually good reception at about 400 km.

DAVE NIEMAN - Akron NY 14001-9529 ESTimes/ Carver TX-11 with $tereo Probe 9 at 25' (815'ASL)

FEB 1986
6 GW-Tr
0847 WJQZ 93.5 NY Wellsville r $ 70
8 Au
1331 WMBI 90.1 IL Chicago g 450
1842 WQDR 94.7 NC Raleigh r 510
1901 CBF-? 91.9 PQ ???? FF ???
FEB 12 Tr
0959 ???? 104.9 PQ ??? FF mr $???
15 MS
1315 WKKS 104.9 KY Vanceburg r 390

COMMENTS: My two new PQers will have to wait for city & mileage. I can only guess by the antenna heading as to location. 91.9, first heard by AU, has been heard regularily since its discovery. 104.9 seems to mention (OVER...)

...Montreal a lot and the antenna heading is about right but it is too close to 104.5 in same. Neither station can be too far as they are heard daily fading in and out. Just have to wait and see them in FM news column.

****

At this point, with no reports and a page to fill, I'll take care of business:

* As much as I regret, I'm resigning as editor. I haven't even had the time (and lately it seems desire) for DX. I'm not leaving the hobby by any means but I'm pushing it down the old list of priorities. The life of a journalist is much different than that of a student. I'm also involved with several peace groups, and with recent events surrounding Nicaragua, Chernobyl, etc.., there is lots to do. Also, I'm not too keen on starting a new log or even in keeping one. Besides, with one opening here this June (Es)... this column should go to someone more active in the hobby.
  I look forward to contributing to this column, however, and although I'm not tuning in as much as I used to, I hope to get in some DXing. I'm especially looking forward to the Tropo season. I'm now living on a hill in the highest part of the county.
  I've told Bill Thompson & Dave Nieman so if anyone is interested they should likely get in touch with them unless an announcement is made elsewhere. I'm going to set the OCTOBER VUD column as the cut-off date. I'll do that one, but by November I hope someone will step in. I'll be happy to offer that person any advice and answer questions.
  My address as it appears on the masthead is CORRECT despite my many moves. My phone numbers are as follows: (519) area code in all cases: WORK:442-4456/7 ; HOME 448-3102. Try either at any time. I do not work regular hours and could be at work Sunday at 0400! If all these are tried and you really need to reach me, my parents are at (416)489-8623.
  I plan to be at Jamestown this year and hope to see you all there. Also may be at ANARC in Montreal in July...not sure yet.
  I would just like to thank everybody for helping make NORTHERN what I feel was a good DX column. I found the amount of contributions and support and interest almost overwhelming at times!
* In other matters, the Es made only one appearance all of June on FM, at least according to my own experience and that of some others. This July reminds me much of July, 1980, with only one notable FM opening - the 17th - and what an opening it was! And May 1986 was like May 1980 ... several good openings. Is the Es season advancing? Soon we'll be getting June DX in January. (Just kidding).
* JOHN SULLIVAN ... I mailed two more CFNY tapes and a TV GUIDE to you.
* PAUL MOUNT says he is looking to trade tapes of FM (and AM) PIRATES. He is at 471 Emerson Ave., Teaneck NJ 07666-2727.

(More DX reports if more come)

****

NORTHERN FEATURES - PIRATE REPORTS

"Report your pirate loggings or walk the plank."
-Cap'n Hook, 1986.

****

ERIC FADER - 3220 Netherlands Ave. Apt. 3G - Riverdale NY 10463

FEB 1986
2
0020 WNCL 103.1 NY NYC area with heavy metal mx, usual distorted signal (slightly).
MAR 1986
17
0110 NINE 91.9 NY Queens-Nassau area Political material (Anti-Reagan of course)
22
2206 WNY, WIR 103.1 (Great Neck NY?) (new for me) One of the biggest idiots I've ever heard. Came on calling himself WNY then realized he shouldn't give his location and claimed to be in Stamford CT. Then realized WNY's NY gave him away so became WCT. Then, 20 mins later decided to be "WIR-Digital Radio on the CM radio network". Used the usual Long Island loop-line telephone number (516)549-9906 as well as (203)348-8000. But NOanswering either. Was on past 0000 on 20th w/ a local mono signal, mellow "urban" mx and banal talk.
21
0021-0026 s-off NINE 91.9 NY Queens-Nassau, said would be on Sat. Mar 22.
0026 WLEU 91.9 NY Laurelton Bad disco mx until 0050 s-off. OC remained till 0110 with weird noises and tones afterwards. Near Kennedy airport in southern Queens.
0120 WNCL 103.1 NYC heavy metal under tentative WPST-NJ station.
24
0214 NINE 91.9 Queens-Nassau, said had been on March 14, 15, 16, 18, 20, 21, 22, 23 nights.

MIKE BUGAJ - 69 Sherman Rd. - Enfield CT 06082

JAN 7 1986 : 2130 WFRT 97.05 and 87.65: this is a pirate operating in the Manchester area. Not on much but Sat. and Tues. evenings is a good time to try for them. The 97MHz was rock.

EASTERN TV-DX

Tax deductible when recommended by a doctor.

JOHN F. COMBS, BOSS MAN

2969 HERSCHEL, CAGE #7, JACKSONVILLE FL 32205

(904) 389-2451 **"Absorbing and moving."** —*Publishers Weekly* DEADLINE: 1ST

No moving parts—zero maintenance

Our reputation is unmarred. We have met *ALL* contract deadlines since our inception.

AGOSTO DE 1986 — Baked to Order for You and Friends — Void where prohibited by law

Summer E-skip has given everybody plenty of hours in front of their screens so far. There have been a couple of long stretches of skip-less days, but when Es has been in, it's been very, VERY good. The most outstanding opening took place June 10/11, and it will be remembered for a long time. Bob Seybold calls it the "best opening in years", Larry Van Horn noted that skip was in almost constantly for 36 hours. High band Es was noted, the 2-meter ham band was wide open, and I have heard a report that even the 220 mHz ham band was open for a time! Matt Sittel in TN logged almost 50 TVs and over 100 FMs on the 11th alone. Here's hoping that the ionosphere continues its restless shennanigans!!

Thomas J. Yingling, Jr., 221 Pinewood Road, Baltimore MD 21222-2345 (EDT)

MAY 1986
10 E 1150 KFDM-6 TX 1150
1159 KEMV-6 AR 904
1300 KOTV-6 OK 1080
16 E 1650 KATC-3 LA 1060
1650 WWL-4 LA 1007
1754 KIMT-3 IA 807
1800 KOET-3 AR 1080
17 E 1621 KTVC-6 KS 1301
1621 KSDK-5 MO 978
(1st time new calls)
1621 KMOS-6 MO 910

MAY 1986
17 E 1930 WREG-3 TN 792
2115 KTBS-3 LA 1150
18 E 1730 Cuba-3 1100
1836 KATC-3 LA 1106
1836 KYTV-3 MO 912

JUNE 1986
3 T 2230 WEFC-38 VA 250
10 E 1820 Cuba-6 1200
"Yogi Bear in SS!"
(¡Más listo que el oso común!--jfc)

JUNE 1986
10 E 2030 WCIX-6 FL 971
2300 WAVE-3 (IN) 515
"Surprise logging!"
2310 KTBS-3 LA 1110
2330 WREG-3 TN 792
11 E 1530 KRIS-6 TX 1452
1530 KIII-3 TX 1456
15 E 1830 KFDX-3 TX 1283
1830 KTVY-4 OK 1186
1830 KOET-3 OK 1080
1830 KOCO-5 OK 1186

EQUIPMENT: Sony KV-1214 12" color TV; Teknika 6510 TV tuner; Toyomenka TMK-717 2" micro-TV; Casio TV-1000 2.6" color LCD-TV; CM Quantum-1114 VHF at 45'; CM 3' Corner Reflector at 45'; Finco 5' UHF dish at 50'; Winegard BC-234 indoor VHF preamp; Winegard AC-4990 UHF preamp on CM; Winegard PA-4975 UHF preamp on Finco; CM high "Q" traps & sound reducers; Magnavox VR8400BK01 VHS VCR

"On 5-10 the MUF went up past 145 mHz as my ham friend was working SSB 2-meters into TX and OK. I got into Mexico on 94/1 mHz with XET-FM--my first ever double-hop FM skip logging. I hope the rest of the summer skip is the same! Lots of Es logs in June, but having trouble at times with CATV leakage messing up picture, and it even bothers the FM band on some freqs. 73's, TOM."

Dave Nieman, Akron NY 14001-9529 (EDT)

JUNE 1986
9 T 2300 Ft. Wayne Us 300
10 T 0600 WKOI-43 IN 399
E 2157 WCPX-6 FL 1008
2200 WUFT-5 FL 992
2313 WEAR-3 (AL) 992
11 E 2043 KCEN-6 TX 1323
14 T 0801 WSTG-64 (MA) 370
(Sorry, Dave--xmtr not in RI--jfc)
0900 WNNE-31 VT 320

JUNE 1986
14 T Also seen: VT 22,33; WCFE-57; Albany Us; WCDC-19; VT 41; NYC 41,68; WVIA-44 xltrs 63,66,72 PA; WSKG-46 xltrs 60,66,71 NY; W32AD Clark Summit PA (WNEP-16 xltr)

JUNE 1986
15 E 1230 KSNW-3 KS 1063
1400 KOTA-3 SD 1249
1824 WBTV-3 NC 551
1900 WRGB-3 TN 661
20 T 2300 WPNE-38 WI 493
21 T 0031 WMTV-15 WI 551
22 T 0115 Lexington Us 467
0752 WYMT-57 KY 468
0901 WETO-39 TN 514
1000 WEFC-38 VA 404

Turn on Your TV

Marty Barvinchak, 113 Morewood Road, Glenshaw PA 15116 (EDT)

All loggings 5-26 0630 EDT:

WXON-20 MI 210 WUPW-36 OH 205 WSFJ-51 OH 140 WIHT-31 MI 230 W41AA WV 54 (Wheeling WNPB-24)
WKBD-50 MI 210 WGTE-30 OH 205 WTTE-28 OH 165 WPTD-16 OH 236
WTVS-56 MI 210 WBNX-55 OH 100 WOSU-34 OH 165 WTJC-26 OH 190

"Here's my whopping report! Sorry...either not much happening or no time to notice it or both. Vacationed on Outer Banks of NC 3/22-29 and was treated to some 'Southern Hospitality' DX. Haven't had time to put that report together."

Matt Sittel (East TN's E-skip King), 220 Brookfield Dr., Kingsport TN 37663 (EDT)

MAY 1986
9 E 1916 unID-2 SS
10 E 0856 KIII-3 TX 1055
0858 KMOL-4 TX 1053
0908 KPRC-2 TX 878
0911 KFDX-3 TX 936
0914 KGBT-4 TX 1166
0927 KOET-3 OK 742
1000 KMID-2 TX 1174
"Black screen on WSJK-2--readable ID ...what luck!"
1018 KDFW-4 TX 864
11 E 0856 KLNE-3 NE 958
(See note #1)
1146 KIII-3 TX 1055
1216 XHY-3 YU 1358
1255 KGBT-4 TX 1166
1257 unID-4 Mexico
"'Love Boat' in SS"
12 E 2055 KGAN-2 IA 621
14 E 1804 CKCW-2 NB 1107
16 E 1111 KGBT-4 TX 1166
1118 KIII-3 TX 1055
1122 KPRC-2 TX 878
1156 KBTX-3 TX 911
17 E 0953 KGFE-2 ND 1089
0958 WISC-3 WI 590
"Tornado safety ad"
0959 KBME-3 ND 1179
1000 WCCO-4 MN 815
1000 KWSE-4 ND 1346
1001 KTCA-2 MN 815
1004 KDLO-3 SD 990
1006 KFYR-5 ND 1179
"Over strong local WCYB--very rare!!"
1008 WDAY-6 ND 1019
(See note #3)
1035 KYUS-3 MT 1386
"After 10 years I finally got it!!"
1947 KPRY-4 SD 1098
1948 KFDX-3 TX 936
2027 KDUH-4 NE 1206
2028 KACB-3 TX 1170
(See note #4)
2029 KMID-2 TX 1174
2100 KOET-3 OK 742
2125 KWAB-4 TX 1120
2128 KAMR-4 TX 1116
2148 KAUZ-6 TX 936
2154 KAVE-6 NM 1265
2155 KTXT-5 TX 1116
2159 KXAS-5 TX 864
2210 KBTX-3 TX 911
18 E 1108 unID-3
(See note #5)
1806 KDLO-3 SD 990
1809 KUSD-2 SD 878
1818 KPRY-4 SD 1098
19 E 1500 unIDs-2,3,4 Can.
20 E 1930 unID-2 TX?
22 E 2028 unID-2
24 E 2058 KOET-3 OK 742
2059 KENW-3 NM 1206
2101 KAMR-4 TX 1116
2104 KMID-2 TX 1174
2114 KFDX-3 TX 936

MAY 1986
24 E 2132 KACB-3 TX 1170
2136 KTVY-4 OK 837
2200 KOB-4 NM 1361
2200 KNMZ-2 NM 1310
(See note #7)
25 E 1036 KENW-3 NM 1036
1036 KIII-3 ? TX T
1125 KOET-3 OK 742
1125 KLNE-3 NE 958
1131 KSNB-4 NE 878
1131 KWNB-6 NE 1040
1348 WSTM-3 NY 567
1403 CBFT-2 PQ 783
1405 CBFT2-3 PQ 788
1411 unID-3 ABC
(See note #8)
1412 WIVB-4 ? NY T

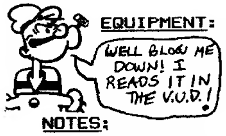
JUNE 1986
6 T 0900 WAVE-3 (IN) 230
7 E 1006 KDFW-4 TX 864
1010 KENW-3 NM 1206
1014 KFDX-3 TX 936
1017 KMID-2 TX 1174
1022 KWAB-4 TX 1120
1114 KTVY-4 OK 837
1122 KAMR-4 TX 1116
1239 KBTX-3 TX 911
1322 KIII-3 TX 1055
1457 KMOL-4 TX 1053
2214 unID-2,4
2257 KUSD-2 SD 878
8 E 1016 KIII-3 TX 1055
1026 KJAC-4 TX 812
1033 KRIS-6 TX 1055
1035 KMOL-4 TX 1053
1035 KENS-5 TX 1053
1056 KPRC-2 TX 878
1120 KFDX-3 TX 936
1128 KEMV-6 AR 540
9 T 0856 WUNC-4 NC 203
0906 WAVE-3 (IN) 230
"Easy to ID by sound --always have an hourly beep"
10 E 0925 unID-2 SS
0942 unID-3 PBS
1747 WPBT-2 FL 747
1821 ColorVision-2 DR 1600
"1st time in 6 yrs!"
1822 Cuba-2,3,5,6 all TV6 Net
1823 Cuba-4 TR Net
1906 WTVJ-4 FL 747
1906 WCIX-6 FL 747
2009 KMID-2 TX 1174
2021 XHY-3 YU 1358
2021 KGBT-4 TX 1166
2021 unID-2 SS DR 1600
(See note #9)
2053 KDBC-4 TX 1413
2054 KENW-3 NM 1206
2056 KIII-3 TX 1055
2130 KFDX-3 TX 936
2157 KRIS-6 TX 1055
2209 KBTX-3 TX 911
2241 KMOL-4 TX 1053
2300 KDFW-4 TX 864

JUNE 1986
10 E 2306 KACB-3 TX 1170
2307 KXAS-5 TX 887
2331 KTXT-5 TX 1116
2341 KIDY-6 TX 1170
11 E 0001 XEZ-3 QR 1500
0200 KMID-2 still in "latest E-skip seen"
0943 unID-2,3 SS
0956 Cuba-4 TR 1100
0957 WPBT-2 FL 747
0957 WEDU-3 FL 590
1002 KDFW-4 TX 864
1004 KNOP-2 NE 1071
1004 KSNW-3 KS 819
1007 KDUH-4 NE 1206
1010 KSNC-2 KS 903
1011 KFDX-3 TX 936
1011 KBTX-3 TX 911
1028 KWGN-2 CO 1242
1043 KIII-3 TX 1055
1055 KTVC-6 KS 975
1101 KRMA-6 CO 1242
1101 KRIS-6 TX 1055
1101 KOAA-5 CO 1241
1129 KTVY-4 OK 837
1129 KOET-3 OK 742
1130 KJRH-2 OK 747
"2 Alive"
1130 KPRC-2 TX 878
1133 KAUZ-6 TX 936
1136 XHRIO-2 TA 1164
1147 KGBT-4 TX 1166
1203 KOTA-3 SD 1233
1258 KMID-2 TX 1174
1300 KENW-3 NM 1206
1332 KMOL-4 TX 1053
1335 KTAL-6 (LA) 693
1427 XET-6 NL 1302
1514 KENS-5 TX 1053
1700 KDLO-3 SD 990
1700 KXJB-4 ND 1076
1757 KSRE-6 ND 1256
1758 KBME-3 ND 1179
1759 CBWFT-3 MB 1182
1807 KGFE-2 ND 1089
1815 CKYB-4 MB 1276
1822 KWSE-4 ND 1346
1841 KUSD-2 SD 878
1842 KCNC-4 CO 1242
1900 unID-3 SS
1926 KLNE-3 NE 958
1928 KTVS-3 CO 1152
1956 KWNB-6 NE 1040
1957 KSNB-4 NE 878
2005 WOWT-6 NE 797
2005 KMTV-3 NE 797
12 E 0906 WPBT-2 FL 747
0938 ColorVision-2 DR 1600
0948 Cuba-4 TR 1100
0952 CKPR-2 ON 918
0957 CKVR-3 ON 568
1006 WLBZ-2 ME 919
1019 CHFD-4 ON 918
1025 WSTM-3 NY 567
1026 KBME-3 ND 1179
1026 KDLH-3 MN 882
1030 KGFE-2 ND 1089

----------MATT'S VOLUMINOUS LOGGINGS CONTINUE ON THE NEXT PAGE----------

More E-skip from MATT SITTEL (the Pat Dyer of the Eastern U.S.)

JUNE 1986						JUNE 1986						JUNE 1986					
12	E	1044	CKCO2-2	ON	648	14	E	0956	KTVS-3	CO	1152	15	E	1853	unID-3	FF	
		1052	CKSO1-3	ON	689			0958	KWGN-2	CO	1242			1858	WGBH-2	MA	734
		1102	KDFW-4	TX	864			0958	KLNE-3	NE	958		T	1959	WO3AJ	VA	92
		1126	KENW-3	NM	1206			1129	KCNC-4	CO	1242				(Wytheville WKPT-19)		
		1127	KOTA-3	SD	1233		T	1129	WAVE-3	(IN)	230	16	E	1157	KNOP-2	NE	1071
		1127	KDUH-4	NE	1206	15	E	0957	KAMR-4	TX	1116			1210	unID-4		
		1128	KNOP-2	NE	1071			0959	KNMZ-2	NM	1310	18	T	1056	WSMV-4	TN	246
		1129	KTWO-2	WY	1335			1059	KENW-3	NM	1206		E	1147	KPRC-2	TX	878
		1151	KUSD-2	SD	878			1319	KXJB-4	ND	1076			1200	KIII-3	TX	1055
		1240	KWGN-2	CO	1242			1321	KDLO-3	SD	990			1200	KMOL-4	TX	1053
		1241	KSNC-2	KS	903			1322	CBWFT-3	MB	1182			1218	KRIS-6	TX	1055
		1249	KSNW-3	KS	819			1827	WSTM-3	NY	567			1223	KBTX-3	TX	911
			"Don't be					1830	unID-4	FF				1258	KTBS-3	LA	702
			fooled: they ran					1841	CHSJ-4	NB	1055			1339	KDFW-4	TX	864
			ID 'KSN-TV 3'"					1844	CBHT-3	NS	1116			1838	ColorVision-2	DR	
			(Stands for Kansas					1849	WBZ-4	MA	734	19	T	1251	WUNC-4	NC	203
			State Network--jfc)					1853	WLBZ-2	ME	919		E	1257	unID-3	PBS	
13	E	2052	KFDX-3	TX	936			1853	CKCW-2	NB	1107	20	E	0928	unID-2	SS	
		2055	KIII-3	TX	1055			1853	WFSB-3	CT	642	21	?	0930	unID-3	CBS audio	



EQUIPMENT: CM 1160 Quantum w/amp @ 34' AGL (1453' MSL)
Archer U-120 @ 30' AGL (1449 ' MSL)
Both connected to CM 9512C rotor
Zenith 19" Color/Panasonic 5" B&W/Sanyo VCR 4400

NOTES:

1 -- "Turned on TV at 0858 and greeted by TP saying: "NEBRASKA ETV CENTER" LINCOLN, NEBRASKA in sparkling color! Before I could get a tape in, it was gone and never came back. For 6 years KLNE has never let me see a clear ID!"

2 -- "At one point I had 2,3,4 all with 'TV Worth Watching--Prairie Public TV,' for 10 minutes, and then pgmg at 0900 without any type of a sign-on, except for playing the National Anthem."
(Yeah, getting individual IDs on some of these statewide ETV nets is like pulling hen's teeth! [Anyone ever REALLY try that?]--jfc)

3 -- "Up to this point I had never logged a TV-6 station, mainly because WCYB-5 overlaps 6 a good deal..."

4 -- "This was weird! I was logging KFDX-3 and KXJB-4 at the same time. Then 1/2 hour later I logged KDUH-4 and KACB-3 at the same time (the former are 750 miles apart, the latter 900 miles apart)."
(Multiple clouds are common in really intense openings, and can make things really hectic and difficult to ID--jfc)

5 -- "TP consisting of 7 columns of colors. (Known as a "full color bar" TP --jfc) They were playing rock music selctions that were hits in 1985. In the middle of one song, a voice came on in SS, screaming like a maniac! I doubt it was XHY-3; they never seem very excited about anything...(Chuckle--jfc)...I wonder if it was pirate TV?"
(I'm 99 44/100% sure it wasn't. It could have been any Mexican or Central American, though the "screaming" makes me think of Sr. Castro--jfc)

6 -- "For 3 straight Saturdays I had logged KOET-3, and the last 2 were at the exact same time." (Mild-mannered DXer Sittel had just entered...the Twilight Zone...doo-DOO-doo-doo doo-DOO-doo-doo--jfc) **TWILIGHT ZONE**

7 -- "I had waited 10 years to see these two."

8 -- "Had a neat ID. They started with XHCH-2 Chihuahua, then it faded to where all I could see were the #s: 13, then 8, then 7. Wish I had seen all of it!" (Probably XHCH-2; I think LVH has noted the same ID--jfc)

9 -- "Nothing like spanning the countries! At SE was ColorVision, at NE was CKPR. The 2 are over 2750 miles from each other! (Wonder if any Canadians caught the Dominican?--jfc)

"I don't know how it has been for everyone else, but this May was the best May I've ever seen for Es here. I finally saw KOB-4 and KYUS-3. It POURED Es for awhile, with huge days occurring, such as May 17th I only got FM Es twice last year, and have already gotten more FM than all last year...WSJK-2 is now off until 1500 weekdays, which will hopefully clear up Ch. 2. Everything up to now has been over WSJK, which can be hard. I'm receiving CBN Cable on Ch. 3, and we don't have cable. I'm tired of it and hope it isn't blocking any Es...June 11 I logged nearly every 2,3,4 from TX to SD/ND and over 100 FMs...After 6 years I saw ColorVision-2 again. It has not changed in all these years!"

Bob Seybold, Bennett Rd., Dunkirk NY (EDT)

JUNE 1986

9 T Evening: "Good opening; steady" WANE-15, WNDU-16, WLFI-18, WPTA-21, WSBT-22, WEYI-25, WSJV-28, WFUM-28, WFLD-32, WKJG-33, WNIT-34, WCFC-38, WUHQ-41, WMSH-46, WGGN-52, WFFT-55; also WFYI-20 and WHMB-40 I-polis IN

10 E Evening: "Started in FL in late evening, moved across Gulf states and then up through West to Northwest. Continued all night into AM of 11th and lasted until 2200 on 11th with no letup. Best opening in years. Some double-hop to MT and ID; also hit Channel 7 on 2 occasions--once with KOAM-7 Pittsburg KS and other unIDed. Covered all low-band channels through most of opening. Too many seen to list all, so will list only new and partial old:

WPBT-2	FL	WEAR-3	(AL)	KID-3	ID	WTVY-4	(FL)	KRMA-6	CO
WBRZ-2	LA	KTBS-3	LA	(1650 mi.)		KDUH-4	NE	WCPX-6	FL
KPRC-2	TX	KATC-3	LA	WTVJ-4	FL	KHAS-5	NE	WCIX-6	FL
KJRH-2	OK	KBTX-3	TX	WWL-4	LA	WPTV-5	FL	WDSU-6	LA
KSNC-2	KS	KSNW-3	KS	KDFW-4	TX	KXAS-5	TX	KOTV-6	OK
KWGN-2	CO	KTVS-3	CO	KTVY-4	OK	KOCO-5	OK	KAUZ-6	TX
KTWO-2	WY	KOTA-3	SD	WDAF-4	MO	KYCU-5	WY	WDAY-6	ND
KNOP-2	NE	KOET-3	OK	KXJB-4	ND	KDLT-5	SD	CKRD-6	AT
KTVQ-2	MT	KLNE-3	NE	KCNC-4	CO	KTVC-6	KS	(1700 mi.)	

(ED. NOTE: I added virtually all the call letters above. Distances are also mine, measured very approximately on a map. Bob listed a Channel 5 as "Enid" which I take to be KOCO-5 Oklahoma City. He also listed a Channel 5 in "Dawson Creek, Alberta." Dawson Creek is in BC and has no Ch. 5. Also listed was a Channel 6 in Shreveport--I have no idea. This report arrived right at deadline and I didn't have a chance to contact Bob to try to resolve these. Sorry--jfc)

12 E "Some E-skip for short time confined mostly to Channels 2 & 3 (briefly on 4 & 5. WBRZ-2, KTBS-3 and a few others."

"Other new loggings since last report include WBNX-55 OH, WKAF-68 NY, and WJPR-21 Lynchburg VA. Did notice considerable E-skip in May, but did not log it. Very busy here with not much time for DX. 73's."

Harry J. Hayes, 9 Henry St., Wilkes-Barre PA 18702 (EDT)

MAY 1986						MAY 1986							JUNE 1986				
16	E	1800	KQTV-2	MO		25	E	1032	WPTV-5	FL		11	E	0735	WTVY-4	(FL)
17	E	0900	KSNC-2	KS				1500	KUSD-2	SD				1916	KFDX-3	TX
		2008	WRCB-3	TN		JUNE 1986								1926	KNOP-2	NE
		2100	WMAB-2	MS		8	T	1801	WTZA-62	NY	90	15	E	1852	WBTV-3	NC
18	E	1300	KUSD-2	SD		10	T	1930	WCDC-19	MA	140			1928	WPBT-2	FL
		1300	KMTV-3	NE			E	1930	WPBT-2	FL		21	T	2000	WCDC-19	MA
25	E	1029	WCIX-6	FL				2045	WESH-2	FL		22	T	1100	WVTA-41	VT

EQUIPMENT: RCA 25" Chroamacolor — Finco 6' dish
Winegard 2-6 antenna — PA-4975 amp
CM VHF amp — 2 CM 7206 UHF traps for overload
(All antennas above inside attic)

"Some of my more common type of E-skip loggings have been deleted from this report. We're in the second dry period for Es of the season, this being June 27. There hasn't been any Es noted since the 15th."

\\

EDITOR'S CORNER

I hate to sound like a broken record, but let me remind you of a few things. The deadline for the column is the 1st of the month, meaning your report must be in my hands on or before the 1st to be assured of publication in that column. Reports arriving on the 2nd or 3rd are sometimes used, but no guarantees! Mail your report by the 25th of the previous month to assure arrival by the 1st; a couple of this month's reports were postmarked the 30th, and that cuts it rather close. Include date, mode, time (24-hr. clock), calls, channel, and state for each logging. Please try to include at least approximate mileages. Indicate your time standard; I will assume you use the official local time at your QTH unless you indicate otherwise. UnIDs should be sent to Robert Grant unless unusual or noteworthy. Station info, articles, etc. should go to Bill Fahber. Am I being picky? I hope not. I'm open to comments & criticisms---jfc.

Keith Pugh, 227 Martin St., New Hope AL 35760 (CDT)

APRIL 1986

```
25 E 1530 unID-2,3,4 SS
     1557 KIII-3   TX  800
30 E 1230 XEW-2 ?  DF    T
        (XEW ID slide)
```

MAY 1986

```
 3 E 1107 unID-2   SS
 5 E 0956 unID-2 CB/Lat mx
10 E 1049 unID-2 to 6
        (Massive CCI;
         MUF 107.9)
11 E 1027 KJRH-2 ? OK    T
     1028 KMID-2 ? TX    T
     1029 KACB-3   TX  840
     1143 KDBC-4   TX 1160
     1146 unID-3   SS
      "Nuestra Television"
       (Possibly XHY--jfc)
     1230 XEFB-2   NL
13 E 1000 unID-2   SS
     1159 KNMZ-2   NM 1100
     1609 XEPM-2   CH 1170
16 E 0915 unID-2,3,4,5
     1059 KACB-3   TX
     1159 KSNC-2   KS  755
     1530-1710 unID-2,3,4
     1800 unID-2   FF
17 E 0758 unID-2   FF
     0859 CKPR-2   ON
     1100 WLBZ-2   ME 1160
     1729 CBOT-4   ON  920
     1800 WCBS-2   NY  790
     1818 KYW-3  ? PA    T
     1837 WBZ-4    MA  980
     2130 KNOP-2   NE  905
18 E 1000 WPBT-2   FL  702
     1038 WLBZ-2   ME
19 E 0919-1100 unIDs-2
21 E 0830 KNOP-2   NE  905
     0900 KTVS-3   CO 1000
     0916 KLNE-3 ? NE    T
```

MAY 1986

```
21 E 1130 KCNC-4   CO 1080
23 E 1000 XHRIO-2  TA  890
     1015 XEFB-2   NL
     1033 XEW-2 ?  DF    T
24 E 1835 KNOP-2   NE  905
     1900 KWNB-6   NE  780
     2100 KLNE-3   NE  860
     2229 KWGN-2   CO 1080
25 E 0845 unID-2
     0958 KNOP-2   NE  905
     1100 KSNB-4   NE  740
     1129 KNDX-2 ? ND    T
30 E 1136 Cuba-2,3,4,5 //
        "'NTV News,' a 'TR'
         circled,then 'TVC'
         before s/off at
         1230; color bars
         left on all 2-5"
```

JUNE 1986

```
 6 E 0953 KGBT-4 ? TX    T
     1006 XHRIO-2  TA  890
     1129 XEFB-2   NL
 7 E 0917 KMID-2 ? TX    T
     0930 KJRH-2   OK  561
     1005 unID-5   SS
     1030 KCNC-4   CO 1080
     1031 KLNE-3 ? NE    T
     1039 KSNC-2   KS  755
     1045 KWGN-2   CO 1080
     1100 KTVS-3   CO 1000
     1359 KNOP-2   NE  905
 8 E 1029 KTIV-4   IA  775
     1130 KNOP-2   NE  905
     1200 KTVS-3   CO 1000
     1223 KWGN-2   CO 1080
 9 E 1345 KWGN-2 ? CO    T
10 E 0948 unID-2,3
     1030 WLBZ-2 ? ME    T
     1031 unID-3   SS
     1326 WPBT-2   FL  702
```

JUNE 1986

```
10 E 2058 KGBT-4   TX  870
11 E 0749 CIII2-2  ON
     0752 CBOT-4   ON  920
     0900 WPBT-2   FL  702
     0903 XEW-2 ?  DF    T
        (XEW ID slide)
     1145 KRGV-5   TX
12 E 0900 KMID-2   TX  900
     0901 unID-2,3 PBS
     0930 KFYR-5 ? ND    T
     1000 KBME-3   ND 1140
     1030 KGFE-2   ND 1120
     1031 KNDX-2   ND 1220
     1102 unID-2   CBC
14 E 0830+ unID-2 to 6
     2010+ unID-2 to 6
15 E 0716+ unIDs-2
     1029 WCBS-2   NY  790
     1150 KFYR-5 ? ND    T
     1713 WLBZ-2   ME 1160
17 E 1111 KUSD-2 ? SD    T
     1130 KNDX-2   ND 1220
     1130 KPRY-4   SD 1020
18 T 1129 WPSD-6   KY  210
19 E 1115 unID-2
        "Ottowa Midday"
     1137 KNOP-2   NE  905
20 E 0845 XEFB-2 ? NL    T
     1300 unID-3   ABC
     1932 unID-2
21 E 1823 KMID-2   TX  900
22 E 1109 XEFB-2 ? NL    T
     1110 unID-3   SS
25 E 1129 KTWO-2   WY 1220
     1428 unID-2 to 6
     1533 KWGN-2 ? CO    T
     1537 KNOP-2 ? NE    T
     1539 KLNE-3 ? NE    T
     1614 KOTA-3   SD 1120
```

EQUIPMENT: RCA 25" color, rabbit ears (VHF).

"Here is my first TV-DX report; also the first TV-DX I've kept record of. I did see some Es last year using my 6-element FM antenna on VHF. But I found out the rabbit ears give much better results and began using them in April this year. Had some problems with cable leaks while using the FM, but not as bad with the rabbit ears. I found out I can eliminate the leak by unhooking the the cable at the grounding block outside my house. It may be awhile before I report agn unless Es stays active (hope so--jfc) or tropo picks up (that would be nice, too--jfc). UHF DX is on hold. I have a 4-bay bow-tie that needs new twin-lead but about the best it will receive is Birmingham at 70 miles. It would take a big set-up for UHF in my area. 73's..."
(Welcome, Keith! So nice to have another new reporter from the South! Tropo can be pretty intense at times south of the Mason-Dixon, so don't write off your set-up yet--jfc)

New Kid on the Block

Larry Van Horn, 160 Lester Drive, Orange Park FL 32073 (EDT)

"Greetings to all. I hope all WTFDAer's DX the last month has been as good as mine and a lot of you have added to your log totals. Undoubtedly the DX during the June 10-11 time frame was the best E-skip I have viewed since I have been DXing TV. 29 stations were logged, 19 of these were new."

EQUIPMENT: Magnavox AV7300 Component Tuner
Magnavox CM8562 Color Monitor
Sears 13" B & W
11 element VHF/UHF log periodic
U-75 Radio Shack Corner Reflector
Radio Shack rotor
Regency MX-7000 scanner (audio)
Panasonic RF-3100 (Ch. 6 audio)

LARRY'S LOGGINGS APPEAR ON THE NEXT PAGE...BE THERE!

Van Horn--continued

JUNE 1986

```
 1 T 2150 WGSE-43   SC  306
10 E 1115 unID-2    SS
     1205 KIII-3    TX  974
     1230 XHRIO-2   TA 1006
     1400 WBAY-2    WI 1041
     1430 KIMT-3    IA 1040
     1515 KJRH-2    OK  900
     1520 KQTV-2   (KS) 986
     1830 TeleAntillas-2
                   DR 1100
     1856 ColorVision-2
                   DR
     1910 KTBS-3    LA  739
     1920 KBTX-3    TX  851
     1923 KPRC-2    TX  825
     1926 KENS-5    TX  992
     1927 KXAS-5    TX  913
     2031 KFDX-3    TX 1016
     2116 TeleAntillas agn
     2156 KJRH-2    OK  900
        (MUF Ch. 6)
     2315 KIII-3    TX  974
11 E 0015 unID-2,3,5
     0057 KMID-2    TX 1220
     0100 KAVE-6    NM 1333
```

JUNE 1986

```
11 E 0104 KTXT-5    TX 1203
     0107 WCTV-6   (FL) 160
     0200 "Finally gave up
            --Es still in"
     0750 "Es in when I
            awoke--MUF 3"
     0843 unID-2,3,5
     0855 MUF Ch. 6
     0856 WFSB-3    CT  943
     0929 KYW-3     PA  774
     0930 WJMN-3    MI 1137
     1015 KRIS-6    TX  973
     1030 KBTX-3    TX  851
     1115 unID-8    CCI
     1131 WDSU-6    LA  491
        "Heard on Car FM"
        (MUF to 162 mHz)
     1229 KXAS-5    TX  913
     1300 KAUZ-6    TX 1015
     1309 KIDY-6    TX 1116
     1331 "Break for 1 Hr"
     1430 KBTX-3    TX  851
     1448 KSNC-2    KS 1124
     1459 KSNW-3    KS 1043
     1525 KOTV-6    OK  900
```

JUNE 1986

```
11 E 1527 KJRH-2    OK  900
     1601 KDKA-2    PA  719
     1615 Shutdown (storm)
     1735 WFSB-3    CT  943
     1800 KJRH-2    OK  900
     1802 "Supper Break"
     1917 KBTX-3    TX  851
     1945 KLNE-3    NE 1219
     2150 "Finally f/out"
12 E 0900 unID-2,3
     1128 XHRIO-2   TA 1006
     1130 MUF Ch. 5
14 E 1700 KBTX-3    TX  851
     2001 CKCO2-2   ON 1021
     2044 WCBS-2    NY  847
15 E 1858 CKCO2-2   ON 1021
     1900 CHBX-2    ON 1110
22 E 1028 unIDs-2
     2000 WUNJ-39   NC  343
24 T 0900 WXIA-11   GA  290
     0925 WTGS-28   GA  156
26 T 1825 WTAT-24   SC  225
     1835 WTGS-28   SC  156
     1836 WECT-6    NC  360
27 T 0025 WITN-7    NC  438
```

"Total Stations--115. Till next month, the best of DX and 73's from N5FPW/4."

That Editor-type Guy, 2969 Herschel #7, Jacksonville FL 32205 (EDT)

JUNE 1986

```
 1 T 2140 SC 2/5/24
     2140 WJKA-26   NC  335
 2 T 2143 WTAT-24   SC  216
10 E 2255 T/in--MUF to 6--
          missed a lot!
     2318 KRIS-6    TX  977
11 E 0011 unID-5    SS
     0040 KAUZ-6 ?  TX    T
     0056 KMID-2    TX 1221
     0805 unID-2 Canada
     0840 WJMN-3    MI 1130
     0859 WFSB-3    CT  934
     0902 WPSX-3 ?  PA    T
     1000 KRIS-6    TX  977
     1006 KRGV-5 ?  TX    T
     1015-1045 I'm away...
     1047 KIII-3    TX  977
     1058 KENS-5    TX  995
        (Severe wx crawl
         over net @ 1103)
     1107 KPRC-2    TX  827
     1115 MUF past 162 mHz
          Beaumont TX NWS
          stn on scanner!
     1130 WDSU-6    LA  494
          3rd Shortest Es!
     1134 KLRN-9 ?  TX    T
        (PBS in and out
         over WFTV...)
     1159 KCEN-6    TX  923
```

JUNE 1986

```
11 E 1228 KBTX-3    TX  853
     1320 KGAN-2 ?  IA    T
     1325 KAUZ-6    TX 1015
     1330 KTAL-6 ?(LA)   T
     1330 KEMV-6 ?  AR    T
     1350 Had to leave...
     2040 Back--still 2-5
14 E 1200 KGAN-2    IA 1002
     1219 KTVO-3 ?(MO)   T
     1225 MUF to 5 briefly
     1945 CKCO2-2? ON    T
     2015 WKYC-3    OH  766
     2104 unID-2 SS audio
15 E 0810 unID-2 CCI
        (But had to leave)
16 E 1545 unID-2
     1611 unID-2    SS
     1741 KGAN-2    IA 1002
     1752 KMID-2    TX 1221
     1806 KQTV-2   (KS) 982
     1812 KTVI-2    MO  753
19 E 1200+ unIDs-2 CDT
     1312 WTWO-2    IN  696
     1330 Had to leave...
24 T 1919 WTAT-24   SC  216
     1919 WJKA-26   NC  335
     2043 WUNJ-39   NC  335
     2228 WCBD-2    SC  216
     2228 WCSC-5    SC  216
25 T 0735 WEBA-14   SC  200
```

JUNE 1986

```
25 T 2238 WTVX-34   FL  234
   E 2238 unIDs-2,3
          Hindered by
          strong, short Tr
     2300 KGAN-2    IA 1002
26 T 1815 WJKA-26   NC  335
     1815 WTAT-24   NC  216
     1815 WLTX-19   SC  268
     1832 WECT-6    NC  335
          Logged on truck FM
          on way to see LVH!
27 T 0845 Tampa 22/28/44
     0845 WTVX-34   FL  234
     0845 WTAT-24   SC  216
     1945 WCSC-5    SC  216
     1945 WTAT-24   SC  216
     2255 WPDE-15   SC  313
     2255 WLTX-19   SC  268
     2255 WJPM-33   SC  297
     2320 WBTW-13   SC  313
     2330 WHMC-23   SC  294
     2330 WJKA-26   NC  335
     2331 WCBD-2    SC  216
28 T 2035 WTAT-24   SC  216
     2035 WJKA-26   NC  335
     2043 WCBD-2    SC  216
     2043 WCSC-5    SC  216
     ------------------
     Totals now 188 stns
     (creeping up on 200)
```

E-skip sure has been playing hide-and-seek this year. After the massive June 10/11 session and a few minor openings, Es has all but died. The tentative KLRN-9 was the highest Es ever seen by me (I'd seen an unID-7 in Orlando years back). Short-lived, but nice! Some typical high pressure tropo later in the month with the highlight being a nice signal from WBTW-13 for about 1/2 hour!!

This column produced on a Commodore 64 utilizing PaperBack Writer 64 and Print Shop, and printed on Larry Van Horn's Panasonic printer (Thanks, Larry!). Bye...

ANARC UPDATE

WHERE WAS LAST MONTHS ANARC UPDATE?

One good thing about doing a column like this is that I don't have to do it every month. If I miss a month,people do not become angry because they missed their favorite column. So, if I get lazy or busy at the begining of a month, then there's no ANARC Update.

Such was the case at the begining of June. We had just come back from our vacation. It was a much needed vacation and we enjoyed every minute of it. We drove along the coast as far as Southwestern Maine. The highlights of the trip were a drive through Cape Cod and Cape Ann, a ferry ride to Nantucket Island, and a visit to Plymouth Rock. Our accomidations included two motels, two guest houses, and one sister-in-law's house. Guest houses are usually large old homes that rent out rooms. The rooms tend to be small and you get what you pay for. You would be surprised what you can live without when you are paying about half the price of a regular hotel or motel.

This was the first trip with my mini TV. It is a Windsor "Deluxe portable". It has a 5" screen and runs on batteries, house current or an auto's cigarette lighter. Windsor is known for its inexpensive radios and portable TV's. The set performed fairly well, but it does have its limitations. The biggest problem with the set was its rejection of a signal near a transmitter. Joyce's sister in West Hartford lives near the transmitter for WFSB-3. In between the local stations, WFSB was everywhere- on VHF and UHF!

The set did come in handy and it did perform well in the situations where it was needed.

The first use of the set came at a rest stop east of New Haven on the Connecticut Tpk. I wanted to see what type of signal Long Island's WLIG-55 had on the other side of The Long Island Sound. The station puts in a good watchable signal. I am suprised that they are not listed in the Hartford-New Haven edition of TV Guide. (I really should not be so surprised as WTZA-62 puts in a good signal over a portion covered by the New York Metro edition of TVG, and yet their program schedule is not listed.)

The next time I pulled out the set was in Fall River, Mass. We went to an old factory that was turned into a factory outlet mall. In one of the outlets, I found a local "TV Facts" magazine. In it was listed a Channel 28. I know there wasn't a Channel 28 on the air in Fall River, but the is a CP for an independent station. I became excited and I excused myself from shopping. I gave the excuse that I wanted to bring the packages to the car. Once in the car, I pulled out the TV and I plugged it in. I received a fair picture of WHLL-27 Worcester, but no Channel 28. As far as I know, they are still not on the air.

The first place we stayed was a motel in Hyannis, Mass. The motel had a nice large room with a beautiful Color TV set. It received the Boston and Providence stations. But one station was missing, the local Cape Cod station WCVX-58. So I found myself playing with the set in the motel room.

The second place we stayed was our first guest house in Provincetown Mass. The room was tiny. It was better used as a walk in closet. There was just enough room for a bed and a dresser. No TV of course. I couldn't even find a place to plug in the Mini-TV. Another drawback of the set is the large number of 'D' cell batteries needed to operate the set (9). I got to see how well the set operated on batteries, but I could not operate it for long periods of time. The battery life of the set is only about 2 hours. Also, the only station that put in a good signal was WCVX-58!

Our next stop was our fanciest and most expensive motel, a Suisse Chalet in Woburn, Mass. It had a large 25" Color TV set. Most of the Boston UHF stations appeared on the unused channels. I couldn't figure out which station was on which channel. Also, several stations were missing, such as WHLL-27, WVJV-66, WGBX-44,WHNT-21, WENH-11,and WNDS-50. Also, Woburn is closer to Providence, RI than Hyannis is. The Providence stations put in a clear watchable signal. The only way I knew this is by playing with my set.

Our next stop was a guest house in Hampton Beach, NH. It was the only place I did not use my Mini-TV. They had a 12" B&W set in the room that was hooked up to a nice sized antenna above the house. I was able to receive all the stations from Boston to Portland. I wish all places to stay had as good a Television system as this. It was a travelling DX'ers dream. Until all places to stay have a TV set up like this, my mini-TV will go on all my domestic trips for now on.

AN UPDATE ON THE ELECTRONIC COMMUNICATIONS PRIVACY ACT 1986

The latest on this piece of legislation, is that a substitute piece of legislation has been introduced to replace HR 3378, the origional bill. The number of the new bill is HR 4952. The most significant change is the change of the definition of interception. The new bill adopts ANARC'S definition, which is the "Acquisition of the contents". The origional bill's definition was the "Interception of the transmission of the contents. It would have been illegal just to receive an encoded signal. The new definition makes it legal to receive the signal if it is readily accessible to the public. The big question is what is an inaccessible signal. Under FCC rules these are coded or scambled signals. Also included are FM subcarrier and subsidiary services, and certain satellite transmissions. The penaly for violating the law could be a year in jail and up to a $10,000 fine. Lawful transmissions to monitor are those that relate to ships, aircraft, governmental enforcement, civil defense, public safety, CB and amature radio. Not covered by the law are cordless telephones.

HR 4952 (as of the date this was written) is still not law. It was approved by the House Judiciary Committee and it is now scheduled to be considered by the full House of Representatives.

The new bill is much better than the old bill. But it has its faults that may have a profound affect on some of the activities now enjoyed by WTFDA members. There is still time to write to your legislators to show your disapproval not only for the bill, but for the whole concept of the law. Once enacted, there is no way to forsee how it will be implimented, enforced, and ruled upon in a court of law.

The Michigan Area Radio Enthusiasts have published a guide to DX-peditions. It explains how to organize and prepare for a DX-pedition, to properly chose a site, and what equipment to bring. It is available by mail for $1.25 by writing to MARE at 24500 Union, Dearborn, Mich. 48124.

If you are interested in keeping up with the activities of ANARC,and its member clubs, the best source is the ANARC Newsletter. It is published monthly and usually includes a calander of upcoming club events, a review of new receivers and equipment called "The Marketplace Report", and timely updates to the Electronic Communications Privacy Act. The cost is only $7.50 a year in North America and is available by writing to ANARC Newsletter P.O. Box 24, Cambridge, Wisc 53523-0024, U.S.A.

Two big conventions will round off the summer. The International Radio Club of America will hold its convention at the Hyatt of the Palm Beaches Hotel in Palm Beach, Fla, from Aug 22-24. For more information, please write to IRCA, P.O. Box 482, East Moline, Il 61244. The other convention is for the National Radio Club. It will be held Labor Day weekend at the Ramada Inn, New Castle, Delaware. For registration information, write to: Dave Schmidt, Box 11502, Wilmington, Del. 19850. Whenever you write, please send a self addressed, stamped envolope and please mention that you heard about it from WTFDA.

I'd like to say "Hello" to everyone I met at the ANARC Convention in Montreal. I have gained many friends at the previous conventions, and I enjoyed meeting many new people at this years convention. A special "HELLO" to all WTFDA who attended ANARCON'86. Please tell me what you thought of the convention. My next ANARC Update will have a full report on the convention.

See you next month----Unless I get busy or lazy!!!

73's

Steven P. Sprachman

From Lima, Peru.

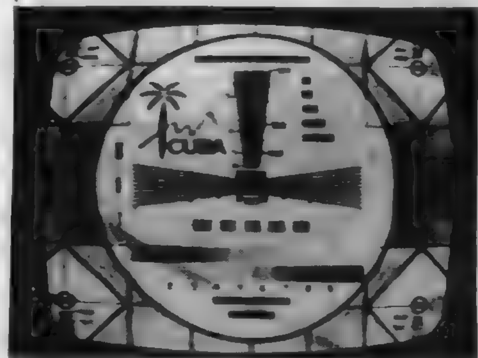
NUMERO UNO EN MUSICA POPULAR

UNION 103.1 FM

PHOTO-NEWS

David J. Nieman
12284 Nice Road
Akron, NY 14001
U.S.A.

....HI! this is John Combs your Eastern TV-DX column editor typing to you. Here are the Cuban pix I promised, along with a brief explanation of each. This is in conjunction with the Cuban TV list I ran in last month's VUD (July 1986 page 9). These photos were taken of DX received at my Orlando QTH in the late 1970's. Since the test patterns and ID slide shown may or may not still be in use, the photos may or may not be of use for reference purposes. Even if not, though, I hope you find them interesting!--jfc



This is the "classic" Cuban TP. It has been mistakenly called the "palm tree" TP, but what appears to be a palm tree is really supposed to be a transmitting tower with RF radiating from it. This is the Camaguey Ch. 4 transmitter, seen in Orlando on a very short E-skip, about 560 miles or so. This TP is probably used by both networks.

This is a Tele-Rebelde TP, logged only once. It may or may not be in regular use. The lettering in the upper right and lower left may read "Santiago de Cuba", indicating that the TP originated with the Ch. 5 xmtr listed as "Puerto Boniato" (note the "5" in the center). However, it was seen on E-skip on Ch. 3, so either Holgin or Santa Clara relaying, probably the former.

This is a "TV Cubana" ID logged in Orlando during extreme tropo conditions to the Carribbean. The Ch. 13 signal is believed to have originated at Guantanamo. Although it is the most distant of the Ch. 13 xmtre (about 725 mi.) hi-band tropo was noted to Puerto Rico the same evening, and Guantanamo is closest to that heading. Both networks probably ID as "TV Cubana".

Thanks John; next month we'll see E-skip photos from Matt Sittel.

dave

FM STATISTICS

Fred Nordquist
7945 Boxford Road
Clay, NY 13041
Deadline: the 5th

FM SCOREBOARD

UPDATED 7/12/86

SORT BY TOTAL

RANK	NAME		LOCATION		TOTAL	88-92	ES	MS	AU	USA	CN	MX	FO	TPU	YB	AS OF:
1	PAT	DYER	TX	SAN ANTONIO	1938	382	1550	41	0	43+	3	19	4	70	70	04/30/86
2	DANNY	BUNTIN	OK	STILLWATER	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	BRUCE	ELVING	MN	DULUTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	JOHN	EBELING	MN	BLOOMINGTON	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	RALPH	STROBEL	IN	MUNCIE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	JIM	PIZZI	NM	LOVINGTON	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	MIKE	BUGAJ	CT	ENFIELD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	FRED	NORDQUIST	NY	CLAY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	DAVID	NIEMAN	NY	AKRON	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	FRED	MCCORMACK	ND	DES LACS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	BOB	SEYBOLD	NY	DUNKIRK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	JOSEPH	FELA	NJ	S.PLAINFIELD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	FRED	MCCORMACK	ND	FARGO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	HANK	HOLBROOK	MD	CHEVY CHASE •	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	JOHN	JEFFERSON	CA	PLEASANTON	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	JOHN	EBELING	MN	PROSIT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	KEN	SIMON	FL	LAKE WORTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	ALAN	MICHALEK	MA	SPRINGFIELD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	KEITH	PUGH	AL	NEW HOPE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	SADLAREK	NJ	OLDWICK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	SCHWEITZER	NJ	E.BRUNSWICK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	PAUL	MOUNT	NJ	TEANECK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	ROBERT	ROSS	ON	LONDON	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	BILL	NOLLMAN	CT	NORWICH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	FRANK	WHEELER	PA	ERIE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	WILLIAM	HEPBURN	ON	CORNWALL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	BOB	SCHWEITZER	NJ	OLD BRIDGE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	LARRY	VAN HORN	FL	ORANGE PARK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	03/22/86
29	WILLIAM	HEPBURN	NT	CORAL HARBOUR	58	5	57	0	0	5	0	0	0	13	84	03/23/86

•=VERIFIED

COLUMN DEFINITIONS are as follows: Total=Total number of FM stations logged. (Freq. changes count as a station, call letter changes DO NOT count. Also count a station only once regardless if logged by different propagation modes.) 88-92=All stations logged from 88.0 to 91.99 Mhz. Es=Total number of stations logged via E-skip. MS=Total by meteor scatter. Au= Tot. via Aurora USA=Total number of states and the '+' = Washington, DC. CN=Number of Canadian provinces logged. MX=Number of Mexican states logged. FO=Number of foreign countries, but not Canada or Mexico. TPU='total number of political units'=sum of USA CN MX and FO. YB=The year you began DXing

AUG 1986 — FM STATISTICS

STATES STATS

USA

STATE	# -DXER	# -DXER	STATE	# -DXER	# -DXER	STATE	# -DXER	# -DXER	STATE	# -DXER	# -DXER	STATE	# -DXER	# -DXER
AL	54-TMc	46-JEb	HI	0-None	0-None	MA	89-RSt2	77-MBu	NM	35-JJe2	33-JPi	SD	28-FMc2	28-PDy
AK	11-JJe3	0-None	ID	22-DBu	21-PDy	MI	139-FMe	118-RSt	NY	163-FNo	140-DNi	TN	93-JAy	82-TMc
AZ	37-PDy	29-TMc	IL	155-RSt	115-BE12	MN	145-JEb	127-JEb2	NC	67-PDy	66-BE12	TX	244-PDy	211-RSa
AR	65-DOb	61-VEa	[illegible]	157-RSt	112-DBr	MS	64-TMc	36-FNo	ND	24-FMc2	23-FMc	UT	22-PDy	20-DBu
CA	278-JJe2	107-PDy	[illegible]	92-JEb	65-BE12	MO	73-DBu	44-FNo	OH	186-RSt	177-FMe	VT	12-RSt2	12-MBu
CO	54-JJe2	49-PDy	[illegible]	77-DBu	43-FNo	MT	25-JPi	16-DBu	OK	95-DBu	40-FNo	VA	46-DBu	41-JEb
CT	49-MBu	41-JPi	[illegible]	72-RSt	45-PDy	NE	41-JJe2	28-PDy	OR	31-JPi	18-FMc	WA	27-JJe2	30-FMc2
DE	11-SWe	10-DOe	[illegible]	72-RSa	45-BE12	NV	17-DBu	15-FMc	PA	136-DNi	104-DOe	WV	33-TMe	34-RSt
FL	122-DBu	107-PDy	[illegible]	[illegible]-RSt2	14-JEb	NH	22-RSt2	15-MBu	RI	11-RSt2	10-MBu	WI	123-BE12	117-JEb
GA	63-JPi	61-PDy	[illegible]	45-GMa	43-DOe	NJ	68-JFe	55-RSc	SC	38-DBu	38-PDy	WY	22-PDy	15-JJe2
												DC	13-SWe	13-DNi

CANADA / MEXICO / FOREIGN

PROV	# -DXER	# -DXER	STATE	# -DXER	# -DXER	STATE	# -DXER	# -DXER	STATE	# -DXER	# -DXER	CNTRY	# -DXER	# -DXER
AB	24-JEb2	19-JJe2	AGU	1-JPi	0-None	[illegible]	9-JPi	2-TMc	PUE	4-JPi	4-TMc	CUBA	2-MBu	1-KSi
[illegible]	17-JJe2	7-JEb2	[illegible]	11-PDy	10-FMc2	HGO	1-JPi	0-None	SIN	2-JJe2	0-None	BELIZ	2-PDy	1-JPi
[illegible]	15-FMc	10-[illegible]	[illegible]	1-PDy	0-None	JAL	12-TMc	10-PDy	SLP	2-TMc	0-None	BERMU	2-FNo	2-DNi
[illegible]	3-FMe	3-RSt	[illegible]	1-JPi	0-None	MEX	1-JPi	1-PDy	SON	1-FMc	1-DBu	EL SA	1-PDy	1-KSi
[illegible]	9-FNo	0-DNi	CHI	6-JPi	6-FMc	MIC	3-JPi	1-PDy	TAB	2-TMc	1-JPi	GUATE	5-PDy	4-KSi
[illegible]	0-SCh	0-DNi	COA	6-JPi1	4-PDy	[illegible]	4-PDy	3-JPi	TAM	6-PDy	2-JEb	HONDU	2-KSi	1-PDy
[illegible]	83-DNi	60-SCh	DF	21-TMc	21-JPi	NL	14-PDy	4-JEb	VCZ	8-JPi	5-TMc	JAMAI	3-JPi	1-TMc
[illegible]	2-JFe	2-RSt	DUR	1-PDy	0-None	OAX	1-JPi	1-PDy	YUC	2-JPi	2-PDy	PUERT	4-KSi	1-DNi
[illegible]	20-DNi	19-FNo	GRO	5-PDy	1-JPi							D.REP	1-KSi	0-NONE
[illegible]	0-FMc	7-[illegible]												
NWT	1-[illegible]	1-JEb2												

KEY TO STATS DXER INITIALS/NAME-LOCATION

[illegible]	Alan Michalek	MA	Springfield								
BE12	Bruce Elving	MN	Duluth	JAy	Jim Ayers	TN	Murfreesboro	PDy	Pat Dyer	TX	San Antonio
DBr	Dave Brumfield	IN	Muncie	JEb	John Ebeling	MN	Bloomington	RSa	Rick Sanford	TX	Burnett
DBu	Danny Buntin	OK	Stillwater	JEb2	John Ebeling	MN	Prosit	RSc	Ron Schweitzer	NJ	E.Brunswick
DNi	David Nieman	NY	Akron	JFe	Joseph Fela	NJ	S.Plainfield	RSt	Ralph Strobel	IN	Muncie
[illegible]	David O'Dell	AR	Little Rock	JJe2	John Jefferson	CA	Pleasanton	RSt2	R. Steinberger	MA	Hudson
DOe	Daniel Oetting	PA	Broomall	JJe3	John Jefferson	AK	Anchorage	SCh	Saul Chernos	ON	Burnt River
FMc	Fred McCormack	ND	Des Lacs	JPi	Jim Pizzi	NM	Lovington	SWe	Steve West	PA	Havertown
FMc2	Fred McCormack	ND	Fargo	JPi1	Jim Pizzi	CA	Orcutt	TMc	Tim McVey	TN	Bolivar
FMe	Frank Merrill	OH	Toledo	JSm	Joseph Smith	NY	Johnson City	VEa	Vernon Eaton	AR	Benton
FMe2	Frank Merrill	MI	Milan	KSi	Ken Simon	FL	Lake Worth	WHe2	Wm Hepburn	NT	Coral Harbor
FNo	Fred Nordquist	NY	Clay	MBu	Mike Bugaj	CT	Enfield				

By now the Es/Tropo conditions are in full swing for us FM DXers — send in your updated totals for FM Scoreboard, States Stats, and All Time FM Distance records, as well as any unusual stats that you want to share - 73 Fred.

WESTERN TV-DX

Fred McCormack
Box 5221
State University Sta.
Fargo, ND 58105

August 1986 Deadline: 9- 5-86

E skip seemed to be best on the 10th, 11th, and 15th of June with the 11th probably being one of the best ever dates for E skip. In addition to these dates, some E skip was reported on most of the balance of the month (including some double hop), but I think the quantity and quality of loggings indicates that 1986 will not go down as an exceptional year for E skip. (I am sure that is an understatement!)

In addition, a number of decent tropo openings were observed in the midwest during the month of June. There is also a report this month about some super tropo into New Mexico on a couple of dates last April and May.

New___ New Mode___ Tent. - t Unidentified - unid S/On - + S/Off - =
ID Color Bars - @ Unid Color Bars - % IHTP - ¢ Misc. Test Patterns - &

CH - Chihuahua CU - Coahuila NL - Nuevo Leon PU - Puebla QR - Queretaro

---

Roger Winsor, 302 W. John, Champaign IL 61820 CLT?

TV was wild this afternoon of June 11: KTVQ-2 MT was in and out with KTWO-2 WY, KPRY-4 SD and KIVV-5 SD for two hours, KPLO-6 SD, KCWC-4 WY @ 8 PM, and KOWY-5 WY.

Equipment here very mediocre: black & white portable to antenna on roof of apartment pointed west - no rotor, splices in lead in - still got five new stations. Spent more time on my real love - FM.

This AM all St. Louis VHF's in good, WGEM-10 IL, WCEE-13 IL, and KFVS-12 IL also fair - good. Rotor would help, but no $$.

73's, Roger

William Draeb, Ellis St., Rt. #2, Kewaunee, WI 54216 CDT

Equipment: 7' Finco dish, B-T CMA-Ub preamp @ 93', .750 cable. Stacked Finco high band yagis with B-T AB-3 (tube type) preamp @ 100' with RG/11 cable. Second tower, 40', with Winegard CH-4026 (lo-band) and Winegard SC713 (hi-band) yagis. Hi-band uses AB-300 preamp. Zenith 14N22 table model 23" b&w (1971) with B-T BTU-2s UHF converter (used for UHF and also the stacked hi-band yagis) and Zenith 16J20 19" b&w (early 60's) (used with antennas on 40' tower), and Panasonic 9" b&w portable.

Lots of DX lately, so here's a report:

May 1986
26 Es 1215 unid 2+, 2- sse
1228 unid ch 4+ sse
unid ch 3 sse
WBRZt 2 LA
28 tr 0600 WUTV 29 NY 445
1822 WSEE 35 PA 405
1830 Lima, Dayton U's
2134 WCET 48 OH 400
WTJC 26 OH
(Strong, under local WGBA-26)
2156 WPBO 42 OH 461
unid channel 21
(Louisville ???)
2215 WXIX 19 OH 400
WIII 64 OH 400
29 tr 0817 WBNX 55 OH 380
30 tr 0705 W42AF 42 WI 78
(Ripon STV)
(See Note # 1)

June 1986
3 tr 0755 KNLC 24 MO 432
KDNL 30 MO 432
WTHT 27 IL 481
3 tr 0811 WCTE 22 TN 587
WKPC 15 KY 437
WGRB 34 KY
WDRB 41 KY 437
WKLE 46 KY 473
0815 WDKY 56 KY
(Same offset as WTVS - 10 bars)
1230 WYMT 57 KY 553
WCET 48 OH 400
WTVQ 36 KY 473
WKYT 27 KY 473
WXIX 19 OH 400
1312 WEVV 44 IN 420
WEHT 25 IN 420
WFIE 14 IN 420
WVUT 22 IN 405
1323 &WKMA 35 KY 499
WLCNt 19 KY
1723 W46AD 46 MI
(Traverse City xlting WCML-6 and WITI-6)
4 tr 0628 WCET 48 OH 400
7 Es 1313 KMIDt 2 TX
KENWt 3 NM
1323 unids chs 4-6
7 Es 1406 KATC 3 LA 1030
1515 KPRC 2 TX 1117
1533 KBTX 3 TX 1079
8 tr 0550 WMSN 47 WI 134
(Same offset as WSYM - 6 bars)
W42AF 42 WI 78
Es 1122 KPRCt 2 TX
KIII 3 TX 1295
KDFW 4 TX 957
KBTXt 3 TX
9 tr 1950 W42AF 42 WI 78
(This is the last time I'll report them. In here pretty regular.)
10 tr 0555 WUTV 29 NY 445
0623 WSEE 35 PA 405
Es 1225 KTWOt 2 WY
KCWC 4 WY
11 Es 1130 KATC 3 LA 1030
WLBT 3 MS 865
unid channel 2
WWL t 4 LA
WCBIt 4 MS
1200 KJAC 4 TX 1080
1253 KDFW 4 TX 957

William Draeb (continued)
15 Es 1200 KYTV 3 MO 589
1230 KMIDt 2 TX
unids chs 5, 6
1300 KENW 3 NM 1103
KAMRt 4 TX
1440 KIDK 3 ID 1214
1515 KTWOt 2 WY
KOTAt 3 SD
KXLFt 4 MT
1730 CITL 4 SA 1175
CKSA 2 SA 1175
1745 CFQC1 3 SA
1800 CKTVt 2 SA
1830 KTVX 4 UT 1264
KUTVt 2 UT
1900 KXLY 4 WA 1450
KLEWt 3 WA
2000 unid ch 4 edu
tr 2105 KDSM 17 IA 371
KHIN 36 IA
KPTM 42 NE 461
2145 KLDH 49 KS 560
KSNT 27 KS 560
(Over WKOW-27)
2220 unid channel 43
2224 unid channel 44
16 tr 0550 @KDSM 17 IA 371
17 Es 1220 chs 2-4 sw
tr 2109 WGRB 34 KY
WDRB 41 KY 437
WTVQ 36 KY 473
17 tr 2109 WCTE 22 TN 587
WCAYt 30 TN
2132 WCET 48 OH 400
WIII 64 OH 400
18 tr 0700 WEAO 49 OH 380
WMSYt 52 VA
0728 WGRB 34 KY
20 tr 2145 WCET 48 OH 400
WKON 52 KY 437
WIII 64 OH 400
WTVQ 36 KY 473
WXIX 19 OH 400
2246 WHIZ 18 OH 400
2308 WUTV 29 NY 445
WSEE 35 PA 405
2314 WUHF 31 NY 500
21 tr 0700 WDKY 56 KY
WYMT 57 KY 553
WSBN 47 VA 589
WOSU 34 OH 395
(Above 2 snwfree)
WPBO 42 OH 461
WSFJ 51 OH 395
WXIX 19 OH 400
WCET 48 OH 400
0733 WMSY 52 VA
0736 WLJC 65 KY
WTJC 26 OH
(Snow free over WGBA-26)
0830 WIII 64 OH 400

11 Es 1300 KFDM 6 TX 1068
1500 KTVC 6 KS 811
1730 KCNC 4 CO 952
KRMA 6 CO 952
KWGN 2 CO 952
1740 KOAA 5 CO 978
1749 KYCUt 5 WY
1813 KWNBt 6 NE
1825 KREXt 5 CO
1830 KTVS 3 CO 837
1856 KRTV 3 MT 1159
1900 KFBBt 5 MT
1905 KTWOt 2 WY
2005 WFSB 3 CT 767
2018 WGBH 2 MA 840
WBZ 4 MA 840
2034 WLBZt 2 ME
2036 WCAX 3 VT 707
12 Es AM chs 2,3 No time to watch.
1225 KPRYt 4 SD
KWSEt 4 ND
13 Es AM chs 2-4 No time to watch.
15 Es 0900 KIII 3 TX 1295
KPRC 2 TX 1117
0930 WESH 2 FL 1130
1200 KFDX 3 TX 945

Note # 1 - May 30 @ 0705 - W42AF snowfree - appeared to be same offset as CKCO-42 - video OK, but no audio.

As you can see, E skip picked up as did tropo activity. Local WBAY-2 must have been plagued with calls of CCI on them because they had an engineer on their local "Noon Show" explaining to the people what to do if their picture gets messed up; namely, "lie down until it goes away", not my words, but what he said. He said someone saw them in Portland, Oregon, but didn't give any date.

The tropo action on June 15 I almost missed. I was watching the tail end of the E skip opening on my 9" portable when I turned to channel 8 to find KCCI-8 with the whip antenna.

KXLY-4 surprised me on the 15th also. I was watching KTVX-4 (minus offset) when I noticed another minus beating with them. It usually turns out to be KCNC-4, Denver, but when the dust settled this time, it was KXLY-4. It just shows that you shouldn't take anything for granted.

WMSN-47 is on. I believe the day I saw them was their first day. They were running a blank slide with call letters.

I had been plagued with cable interference for the past month, at times wiping out semi-locals in Milwaukee, etc. I got them to come over here and take a look at it, and I thought it went in one ear and out the other. This was two weeks ago. But I see, tonight the problem is gone. I hope for good.

Randy Miltier, 1068 Fairview Avenue, San Jose, CA 95125 PDT

May 1986
25 Es 1314 KPLO 6 SD 1250
1400 unids chs 2-6

June 1986
4 Es 1300 unid chs 2, 3
11 Es 1950 unid channel 2
22 Es 1100 unid chs 2, 3
1337 XEW 2 DF 1900
1400 unid channel 2
1538 unid channel 3
29 Es 0900 KN?? 2 ??

July 1986
5 Es 0900 unids chs 2-6

E skip not overwhelming here, but I haven't had the TV on much. I spent most of May in Canada, so I'm sure I missed an opening or two. I was hoping to get my new Quantum up by this season, but....

Interesting fact on the KPLO-6 catch of May 25, last time I saw KPLO-6 was in 1969....on May 25! I told the chief engineer this in my reception report, and he wrote back saying he's looking at my 1969 letter and photos as he writes my verification letter. The same CE, Darrell House, answered both letters.

I believe my June 29 channel 2 is KNOP in North Platte. Details sent to CCI.

William Eckberg, 1032 Sterling Road, Dixon, IL 61021 CDT

Equipment: 1966 Zenith b&w tube receiver ch 14N22, modified Zenith 175-1953 detented tuner. Channel Master 1110 VHF antenna. Channel Master 7 foot UHF parabolic antenna with Winegard PA4975 preamplifier on a 40' tower.

June 1986

3 tr	0044	WOWK	13 WV	428
	2230	KPTM	42 NE	335
6 Es	2215	KWGN	2 CO	811
	2255	KNMZ	2 NM	972
	2330	KMID	2 TX	967
	2400	KPRC	2 TX	890
7 Es	0935	WWL	4 LA	813
	1000	KWGN	2 CO	811
	1035	KPRC	2 TX	890
	1100	KBTX	3 TX	856
	1130	KENW	3 NM	912
		KMID	2 TX	967
	1320	KNAZ	2 AZ	1258
	1400	WBRZ	2 LA	784
8 tr	0510	WMSN	47 WI	92
9 Es	1300	KPRC	2 TX	890
10 Es	1530	KUTV	2 UT	1139
	1600	KNAZ	2 AZ	1258
		KNMZ	2 NM	972
	1800	WPBT	2 FL	1229
	1855	KIII	3 TX	1072
	1900	KRGV	5 TX	1189
	2100	XHCH	5 ??	????
		(See Note # 1)		
	2200	KENS	5 TX	992
	2215	KGBT	4 TX	1183
11 Es	0105	KACB	3 TX	933
	0800	WCSC	5 SC	797
	0830	WCBD	2 SC	797
	1025	WPBT	2 FL	1229
	1030	KRGV	5 TX	1189
	1040	XEFB	2 NL	1282
	1045	KIII	3 TX	1072
11 Es	1200	WDIQ	2 AL	727
	1205	WWL	4 LA	813
	1230	WKRG	5 AL	752
	1300	KALB	5 LA	742
	1330	WUFT	5 FL	923
		WTVY	4 AL	758
	1435	WEAR	3 FL	792
	1635	CKND2	2 MB	752
	1650	CKBI3	4 SA	983
	1655	CKBI	5 SA	1063
	1700	KWSE	4 ND	802
	1725	CKTV	2 SA	918
	1740	KOWY	5 WY	966
	1750	KTVQ	2 MT	968
	1800	KOTA	3 SD	699
		KIVV	5 SD	735
	1830	KTWO	2 WY	849
	1845	KIDK	3 ID	1123
	1930	KCWC	4 WY	966
	1945	KUTV	2 UT	1139
	2030	KWGN	2 CO	811
12 Es	0900	WGBH	2 MA	918
	0905	KIII	3 TX	1072
	0915	WFSB	3 CT	842
	0930	WPBT	2 FL	1229
	1030	KNMZ	2 NM	972
	1100	KIDK	3 ID	1123
	1200	KPRC	2 TX	890
	1500	KNAZ	2 AZ	1258
	1930	WESH	2 FL	983
13 tr	0505	K60AL	60 IA	137
		(Keokuk		LPTV)
15 Es	0900	KNMZ	2 NM	972
	0925	WPBT	2 FL	1229
15 Es	0930	WESH	2 FL	983
	1000	KIDK	3 ID	1123
	1100	KTVQ	2 MT	968
	1200	KFDX	3 TX	729
	1345	KOAA	5 CO	828
17 tr	2250	WKSO	29 KY	405
18 tr	0450	WLOS	13 NC	558
	0520	KSNF	16 MO	413
	0525	WXVT	15 MS	570
		KLRT	16 AR	503
	0535	WZTV	17 TN	408
	0555	KTVP	29 AR	463
	0645	WCAY	30 TN	408
19 tr	0455	KSNF	16 MO	413
	0545	KTVP	29 AR	463
Es	1230	WPBT	2 FL	1229
23 tr	0515	KSNF	16 MO	413
25 tr	0445	WTVN	6 OH	394
	0455	WLOS	13 NC	558
	0513	WOIO	19 OH	401
	0520	W43AG	43 KY	348
	(Hopkinsville			LPTV)
	0600	WDKY	56 KY	368
	0635	WCAY	30 TN	408
26 tr	0440	WBIR	10 TN	489
	0445	WLOS	13 NC	558
	0515	WHNT	19 AL	503
	0535	WZTV	17 TN	408
	0543	WAFF	48 AL	503
	0610	WZDX	54 AL	503
28 tr	2330	WQLN	54 PA	481
	2340	WPGH	53 PA	491
29 tr	0505	WVAH	23 WV	463
	0520	WOWK	13 WV	428

Note # 1 - I saw XHCH on channel 5. According to the WRTH that call is on channel 2. I'm positive on the channel I saw it on. Is this a repeater? Anyone any ideas?

June 11 was the best E skip day ever for me with 28 new stations positively seen. Very intense from 1700-1930. KCWC-4 took out local WHBF-4 easily - both in the same direction. I credit the logging to my Channel Master 1110. Its directivity is outstanding compared to the other VHF antennas I have used.

There were several tropo openings the last half of the month. I logged WLOS-13 at 558 miles several times. They get out with their tall tower. Their test pattern is very distinctive with their ID, etc, in the bullseye. I see it from 0430-0500 weekdays.

John Ebeling, 9209 Vincent Avenue South, Bloomington, MN 55431 CDT

Reception at Prosit, Minnesota cabin. Cabin phone: 218-345-6718

May 1986

17 Es	1200	WCBD	2 SC	
	1702	KMID	2 TX	
	1832	WTVY	4 AL	
	2030	KPRC	2 TX	
18 Es	1100	WKTV	2 NY	
	1130	WFMY	2 NC	
19 Es	1800	WESH	2 FL	
23 Es	1500	KUTV	2 UT	
	1750	XEPM	2 CH	
	1759	KMID	2 TX	
25 Es	1100	KALB	5 LA	
		Low band full of E skip.		
25 Es	1200	KWGN	2 CO	Vis
		WUND	2 NC	Aur
	1300	KNMZ	2 NM	
	1406	KTVQ	2 MT	
	1600	KAID	4 IA	
	1603	KBCI	2 ID	
26 Es	1201	WDIQ	2 AL	

June 1986

2 Es	0945-1130	CFAC	2 AB	
	1830	KBCI	2 ID	
8 Es	1100	WBRZ	2 LA	
	1130	KPRC	2 TX	
14 Es	1100	WBRZ	2 LA	
15 Es	1100-1400	WNGE	2 TN	
	1405	KMID	2 TX	
	1410	KNMZ	2 NM	
	1450	KDBC	4 TX	
	1515	XEJ	5 CH	
	1700	WGBH	2 MA	
	1750	CKTV	2 SA	
	1800	CJFB	5 SA	
29 Es	1100	KNAZ	2 AZ	
		KOB	4 NM	
	1300	KNAZ	2 AZ	
30 Es	1100	WESH	2 FL	

Marvin Shults, RR#1, Toulon, IL 61483 CDT

* Reception on vertically polarized antenna.

June 1986

6 Es	2157	KWGN	2 CO	
	2158	KUTV	2 UT	
	2159	unid channel 4		
		(KCNC or KTVX)		
7 Es	0847	KNMZ	2 NM	
	0859	KNAZ	2 AZ	
	1157	KENW	3 NM	
	1158	XEPM	2 CH	
	1159	KNAZ	2 AZ	
	1220	KMID	2 TX	
	2059	KNAZ	2 AZ	
8 Es	1052	KNAZ	2 AZ	
	1058	KVOAt	4 AZ	
tr	1358	WLKY	32 KY	
	2200	Dayton ch 22, 45		
		WLIO	35 OH	
		WBGU	57 OH	
	2228	WOIOt	19 OH	0kHz
		WVIZt	25 OH	+kHz
		WUABt	43 OH	0kHz
	2229	WQLN	54 PA	
		WPGH	53 PA	
	2245	WPXIt	11 PA	
	2247	W67ALt	67 OH	
	2259	WMSN	47 WI	
9 tr	0745	KXLI	41 MN	
	0758	Minneapolis 9, 11, 17, 23, 29		
	0759	K14AF	14 IA	
	(Decorah		KYIN-24)	
10 Es	1230	KTVQt	2 MT	
	1258	KUTVt	2 UT	
	1259	KTWOt	2 WY	
	1300	KYUS	3 MT	
		(ID with KOUS-4)		
	1330	KTWO	2 WY	
	1358	WESH	2 FL	
	1359	WTVY	4 AL	
		WEDU	3 FL	
	1452	KTVXt	4 UT	
	1453	KSL	5 UT	
	1454	KUTV	2 UT	
	1459	KTVX	4 UT	A ID
	1817	KMID	2 TX	
	1858	XEFB	2 NL	
	1900	KIII	3 TX	
		KENS	5 TX	
	1907	XET t	6 NL	
	1908	KMOLt	4 TX	
	1959	KENW	3 NM	
	2047	XEJ	5 CH	
	2100	KRGV	5 TX	
		KACB	3 TX	
	2118	XEPNt	3 CU	
	2128	KIDYt	6 TX	
	2130	unids chs 2-6 sw		
		(Intense)		
11 Es	0800	WWAY	3 NC	
	0823	WESH	2 FL	
	0830	WUNDt	2 NC	
	0859	WPBT	2 FL	
	0900	WEDU	3 FL	
	0901	WCBD	2 SC	
	1025	KRGV	5 TX	
11 Es	1028	ICR	2 Cuba	
	1029	WEAR	3 FL	
	1030	unid ch 5 Mexico		
	1034	XEFB	2 NL	
	1129	XEPM	2 CH	
		XEJ	5 CH	
		KAVE	6 NM	
	1200	WBRZ	2 LA	
	1222	*unid ch 4 TX NBC		
	1229	WKRG	5 AL	
	1233	*KJAC	4 TX	
	1235	KRGV	5 TX	
	1241	KPRC	2 TX	
	1300	KATC	3 LA	
	1324	KFDMt	6 TX	
	1329	WJXT	4 FL	
	1339	WSAV	3 GA	
	1400	+WSJK	2 TN	
	1514	WEDU	3 FL	
	1518	WCPX	6 FL	
	1520	WPTV	5 FL	
	1521	WESH	2 FL	
	1555	WWAY	3 NC	
		*WEDU	3 FL	
	1600	WDIQ	2 AL	
	1800	KOWY	5 WY	
	1830	KCWC	4 WY	
		KOWY	5 WY	
	1845	KOTA	3 SD	
	2058	KUTV	2 UT	
	2100	CBFT	2 PQ	
	2114	CJBRT	3 PQ	
12 Es	0852	KRGV	5 TX	
		XEFBt	2 NL	
	0856	KIII	3 TX	
	0858	KMOL	4 TX	
	1014	WFSB	3 CT	
	1025	WGBH	2 MA	
		*WLBZ	2 ME	
	1052	*KNAZ	2 AZ	
	1056	CBFTt	2 PQ	
	1100	KIDK	3 ID	
	1142	*KUTV	2 UT	
		CBFT	2 PQ	
	1145	XEPM	2 CH	
		KNAZ	2 AZ	
	1350	KUTV	2 UT	
	1528	KNAZ	2 AZ	
	1530	KWGN	2 CO	
14 Es	1030	XEPM	2 CH	
15 Es	0900	KNAZ	2 AZ	
	0907	KVOAt	4 AZ	
	0930	KUTV	2 UT	
	0958	KMID	2 TX	
	1000	KIDK	3 ID	
	1030	XEPM	2 CH	
	1048	KTVQ	2 MT	
	1100	KUTV	2 UT	
	1150	KWGN	2 CO	
	1159	KENW	3 NM	
	1230	*KENW	3 NM	
	1239	KCNCt	4 CO	
		unid ch 5 NBC		
	1400	KNAZ	2 AZ	
		KCWC	4 WY	
	1728	KNMZ	2 NM	
15 Es	1833	CFRN	3 AB	
	1843	CBXT	5 AB	
		CKRD	6 AB	
	1856	KTVQ	2 MT	
	2000	CKSA	2 AB	
		KIDK	3 ID	
16 Es	1742	WCAX	3 VT	
	1749	WLBZ-2 or WKTV-2		
	1759	WLBZ	2 ME	
17 tr	0830	KSHB	41 MO	
		KYFC	50 MO	
		KZKC	62 MO	
18 tr	1129	KSPR	33 MO	
		KDEB	27 MO	
	1130	KTVP	29 AR	
19 tr	1130	WRGT	45 OH	
		Detroit ch 50,56		
20 tr	0555	KBSI	23 MO	
	0557	KSNT	27 KS	
	0603	KSHB	41 MO	
		KZKC	62 MO	
	0617	K60CLt	60 IA	
	0633	KLDH	49 KS	
	0645	KOZJ	26 MO	
		K56BX	56 MO	
	(Steelville			LPTV)
	0710	KODE	12 MO	
	0729	KPTM	42 NE	
	1059	KGLDt	11 KS	
21 tr	0238	W57AO	57 IL	
	(Robinson			LPTV)
	0253	WXIX	19 OH	
		WRGT	45 OH	
	0258	WTOLt	11 OH	
		WIHT	31 MI	
		Dtroit 50,56t,62		
22 tr	2159	KC ch 9,41,50,62		
23 tr	0730	WCET	48 OH	
		WIII	64 OH	
		WLIO	35 OH	
	0745	Detroit 50,56,62		
	0750	WCLQ	61 OH	
		WUAB	43 OH	
	0758	WUPW	36 OH	
	0806	WOIO	19 OH	
24 tr	0630	KSHB	41 MO	
		KZKC	62 MO	
	0700	KLDH	49 KY	
25 tr	0600	WAQP	49 MI	
		Cincy ch 48, 64		
	0620	KC chs 41,50,62		
	0624	WKEF	22 OH	
		WTLW	44 OH	
	0630	WKOI	43 IN	
		unid channel 43		
Es	1159	KNMZ	2 NM	
	1200	KENW	3 NM	
	1210	XEPM	2 CH	
	1222	KNAZ	2 AZ	
	1240	KVOAt	4 NM	
	1242	KOB t	4 NM	
	1257	unid channel 5		
	2200	KTWO	2 WY	
		KTVQ	2 MT	
		CFRNt	3 AB	
26 tr	1056	Detroit 50,56,62		

Marvin Shults (continued)

26 tr 1059 WUPW 36 OH
28 tr 0816 KC chs 41,50,62
KLDH 49 KY
0828 K28AE 28 MN
(Fairmont LPTV)
2026 WAQP 49 MI
Dtrt 20,50,56,62
2029 CBEFT 54 ON
2042 WCLQ 61 OH
2043 unid channel 67
2044 CICO59 59 ON
2100 WIHT 31 MI
(Over WMBD-31)
28 tr 2130 WUAB 43 OH
29 tr 0500 WHIO 7 OH
0510 WLEX 18 KY
0511 WXIX 19 OH
0518 WOWK 13 WV
0525 WCMH 4 OH
0526 WVAH 23 WV
0528 WTVN 6 OH
0536 WIII 64 OH
0540 WKRC 12 OH
0547 WHIZ 18 OH
0550 WPBY 33 WV
0554 WDKY 56 KY
0559 WTJC 26 OH
WKYT 27 KY
29 tr 0627 WCPO 9 OH
0633 WPTD 16 OH
WPTO 14 OH
0638 WCET 48 OH
0650 WSFJ 51 OH
0653 WCVN 54 KY
0656 WKON 52 KY
0657 WKLE 46 KY
0659 WBNS 10 OH
WPBO 42 OH

July 1986
2 tr 0421 WAVE 3 KY
0425 WILX 10 MI

Paul Mitschler, 4911 Idlewilde SE, Albuquerque, NM 87108 MDT

Equipment: Four element channel 3 yagi, five element channel 6 yagi, rotor @ 25 feet Hitachi 9" color, Universal v1000 electronic tuner.

May 1986
29 Es 1700 XEZ 3 QR 930
1830 KTVO 3 IA 850
2115 WAVE 3 KY 1175
31 Es 0837 WRBLt 3 GA
0940 &unid channel 3 e
1050 KCRA 3 CA 850

June 1986
7 Es 0900 WRBLt 3 GA
1037 CBWFT 3 MB 1150
1040 KDLH 3 MN 1090
KBME 3 ND 850
1300 KIMT 3 IA 910
1330 KTVO 3 IA 850
KMTV 3 NE 710
WMT 2 IA 920
1500 WAVEt 3 KY
CKSO 3 ON 1500
1530 KRTV 3 MT 875
8 Es 0800 KIMTt 3 IA
WAVEt 3 KY
10 Es 1120 XEZ 3 QR 930
10 Es 1120 XHP t 3 PU
1520 WREGt 3 TN
1530 KDLH 3 MN 1090
KBME 3 ND 850
1800 WSIL 3 IL 1000
1825 WAVEt 3 KY
2100 WPSDt 6 KY
11 Es 0925 WDSUt 6 LA
WEAR 3 FL 1190
WRCBt 3 TN
1017 WBRC 6 AL 1150
1130 KIMT 3 IA 910
1415 CBWFT 3 MB 1150
1730 KDLO 3 SD
2000 KBME 3 ND 850
12 Es 0800 unid ch 3 CBS
0900 KMTV 3 NE 710
KIMT 3 IA 910
1015 WEAR 3 FL 1190
1030 WLBTt 3 MS
14 Es 0915 WREGt 3 TN
tr 1030 KENW 3 NM 200
15 Es 1510 KIMT 3 IA 910
1650 WEAR 3 FL 1190
16 Es 1500 XEZ 3 QR 930
19 Es 2145 unid ch 2 CBS ne
20 Es 0800 KIII 3 TX 750
0935 XEZ 3 QR 930
1200 XHP 3 PU
21 Es 2100 KCRA 3 CA 850
2130 KEYT 3 CA 725
KTVU 2 CA 890
22 Es 0830 XEZ 3 QR 930
1630 KVDO 3 OR 1090
1800 KCRA 3 CA 850
25 Es 1230 KCRA 3 CA 850
1320 KVDO 3 OR 1090
1340 CBWFT 3 MB 1150
KBME 3 ND 850
CKSO 3 ON 1500
26 Es 0800 unid ch 3 ABC e
2145 KVDOt 3 OR
29 Es 0848 unid ch 3 east
30 Es 0908 KEYT 3 CA 750

It has been very good to see the E skip this month, and I was quite surprised to get KENW-3 from Portales which lies on the other side of the mountains east of the city. It would sure be nice to get a signal on either channel 4 or 5, but the locals just seem to block all chances.

Jeff Kadet, W3CRH, Box 20, Macomb, IL 61455 (309)-833-1809 CDT

Equipment: Zenith 9" black & white, Zenith 13" color, Channel Master 1110 with CP 3800 preamp, RG-11 at 50', Channel Master 7' dish with PA 4975 preamp, .500 cable at 55', Winegard 5 element low band vertically polarized at 20'

June 1986
6 Es 2329 KNMZ 2 NM 890
7 Es 0001 KPRC 2 TX
0008 KJAC 4 TX 760
1100 KTBS 3 LA 580
1130 KENW 3 NM 820
KDBC 4 TX 1055
1217 %unid channel 5
1219 KUTV 2 UT 1105
1300 KTVX 4 UT 1105
1329 KREX 5 CO 950
7 Es 2026 KNAZ 2 AZ 1180
2044 KNMZ 2 NM 890
8 Es 0114 KMID 2 TX 890
1044 KPRC 2 TX
1059 KBTX 3 TX 755
1215 KACB 3 TX 840
1230 KFDX 3 TX 625
1251 KIII 3 TX
1306 KMID 2 TX 890
2035 WCBD 2 SC 790
tr 2335 WMSN 47 WI 180
9 Es 2100 unid ch 2 XEW
10 Es 1359 WPTV 5 FL 1125
WUFT 5 FL 880
WTVY 4 AL 705
1422 WPBT 2 FL 1175
1430 KUTV 2 UT 1105
1436 KWGN 2 CO 755
1459 KTVX 4 UT 1105
1700 KNAZ 2 AZ 1180
1759 KGBT 4 TX 1065
KRGV 5 TX 1160

Jeff Kadet (continued)

10 Es 1812 unid ch 3 Mexico
(2 stations - 1 overmodulated)
2000 KENW 3 NM 820
2100 KIDY 6 TX 880
2137 XET 6 NL 1160
unid ch 6 XEW
unid ch 5 XEW
unid ch 5 Mexico
(Got loc ad pix)
2305 KENS 5 TX 890
2328 =unid channel 6
11 Es 0035 KDBC 4 TX 1055
0043 KIII 3 TX
0103 KMOL 4 TX 890
0106 =KACB 3 TX 835
0115 =XEFB 2 NL 1100
0220 KTVK 3 AZ 1265
0859 WPBT 2 FL 1175
0930 WEAR 3 FL 725
0959 KRIS 6 TX 965
KRGV 5 TX 1160
1015 KIII 3 TX
1018 XEZ 3 QR 1225
1031 unids channel 5
(Two of them)
1228 WDSU 6 LA 735
WKRG 5 AL 700
KALB 5 LA 645
WWL 4 LA 735
1259 WPTV 5 FL 1125
WCPX 6 FL 980
1329 WJXT 4 FL 865
1341 WCSC 5 SC 800
1359 WRAL 5 NC 725
WUNC 4 NC 700
WUND 2 NC 840
1459 WCIX 6 FL 1175
WESH 2 FL 950
1615 WSAV 3 GA 785
1629 WWAY 3 NC 790
1747 KIVV 5 SD 725
1800 KFYR 5 ND 675
KPLO 6 SD 510
(Closest E skip)
1815 KOUS 4 MT 925
KYUS 3 MT 860
(Above two //)
KXMA 2 ND 750
1829 KXGN 5 MT 840
1851 KTVQ 2 MT 975
1858 KTVM 6 MT 1150
1943 KOWY 5 WY 950
2021 unid ch 3 CTV
12 Es 0940 WPBT 2 FL 1175
0956 WCVB 5 MA 1010
0959 WEDU 3 FL 980
13 Es 1829 WPBT 2 FL 1175
1930 KMID 2 TX 890
14 Es 1035 unid ch 2 Mexico
1059 WESH 2 FL 950
1115 WPBT 2 FL 1175
1124 WEDU 3 FL
1959 WCBD 2 SC 790
15 Es 1500 KNAZ 2 AZ 1180
1552 XEFB 2 NL 1100
1654 KNMZ 2 NM 890
1750 CKTV 2 SA 970
1758 CFRN 3 AB 1410
1830 KOUS 4 MT 925
1848 KTVM 6 MT 1150
1900 CBXT 5 AB 1410
2053 CKSA 2 AB 1275
16 Es 1345 XEFB 2 NL 1100
1645 WPBT 2 FL 1175
tr 2220 K56## 56 ?? PTL
(Bearing 230°)
17 Es 1300 KNOP 2 NE 530
1317 KTVQ 2 MT 975
1331 KOTA 3 SD 685
18 tr 0026 KJTM 38 AR 445
(Station #700!!)
0054 WCOV 20 AL 615
0104 WKAB 32 AL 615
0148 WCYB 5 TN 525
0200 WDEF 12 TN 475
0212 =WVTM 13 AL 575
0219 WMAZt 13 GA
0259 WBNA 21 KY 300
0303 WTBS 17 GA 575
WBMG 42 AL 575
0335 WREGt 3 TN
0346 WSMV 4 TN 365
0415 @WTVC 9 TN 475
0426 @KARK 4 AR 410
0436 WTVM 9 GA 635
0447 @WTVA 9 MS 450
0450 K33AA 33 IA 100
(Ottumwa w/KFVS-12)
(My 6th ch 12 on this)
0452 @WBIR 10 TN 485
0502 @WDBD 40 MS 575
0515 KTVE 10 AR 520
0518 @W43AG 43 KY 305
(Hopkinsville LPTV)
0523 @WXVT 15 MS 495
0524 Huntsville ch 19
31, 48, 54
0558 +WTTO 21 AL 575
0600 WJSU 40 AL 545
18 tr 0630 WJSP 28 GA 635
0752 WTRT 26 AL 425
2200 KIOA 15 IA 100
(Not seen since)
19 tr 0043 KXTX 39 TX 640
KDFI 27 TX 640
KTXA 21 TX 640
(All brfly snow free.)
0204 WDBB 17 AL 535
0332 KTVTt 11 TX
(0 kHz u/KPLR)
0450 @unid channel 9
(Guitar solo sw)
2344 =K45AY 45 AR 325
(See Note # 1)
20 Es 1507 unid ch 2 Mexico
2230 WCBD 2 SC 790
23 tr 2230 Hntsvlle 48,54
455
24 Es 1100 WESH 2 FL 950
1159 WPBT 2 FL 1175
25 tr 0332 WETO 39 TN 520
0525 Dtrt U's snwfree
0545 %unid channel 31
(20 kHz u/WRHT)
Es 1415 KWGN 2 CO 755
1425 KTVS 3 CO 650
2Es 1458 KCRA 3 CA 1625
Es 1517 KATC 3 LA 725
1518 KJAC 4 TX 760
1530 KPRC 2 TX 775
1533 KDUH 4 NE 685
1559 KMID 2 TX 890
WEDU 3 FL
1959 WTVJ 4 FL 1175
2100 WPBT 2 FL 1175
2202 WCPX 6 FL 980
2231 KTVQ 2 MT 975
26 tr 0443 %WLOS 13 NC 550
0514 +WSWP 9 WV 540
Es 2043 unid ch 2 Mexico
28 tr 0504 St. James, MN
32,48,52,54 315
0511 KDLOt 3 SD
(RETMA TP wo/ID)
2025 CBET 9 ON 410
(Over WGN-9)
Detroit, Sarnia,
Cleveland UHF's
2104 OKC UHF's 510
29 tr 0154 unid channel 22
0311 WPGH 53 PA 555
0420 WPXI 11 PA 555
0518 @WFAT 19 PA 600
Es 1135 KUTV 2 UT 1105
1200 KIDK 3 ID 1100

Note #1 - The channel 45 signed off at 0030, then an ID slide (too fuzzy) and audio from a local FM station.
Note #2 - The unidentified channel 22 was in all night with black and white movies; might be W22AE unscrambled?

No complaints about this DX season so far. Highlights for June include KCRA-3 for state #44 and the first double-hop from Macomb. Caught them at the tail end of a local newscast with a very clear audio ID. Signal was in for only a few minutes, poor video and fair audio. I figure the signal bounced off the Rockies somewhere before heading back up again.

Also a nice tropo opening on the 18th which included WCYB-5 for my first station seen via tropo, Es, and MS. In fact they're the only MS ID'ed here thanks mainly to CBS

Jeff Kadet (continued) Nightwatch, but this may change with KMOV-4 (ex KMOX) off weekday AM's now as well as WSIL-3's obnoxious test pattern and sometimes WISC-3. KMOV, WISC, and KFVS have dropped Nightwatch recently. There was also some tropo and E skip on the 25th and 26th affected by Hurricane Bonnie.

A slew of new stations have come on the air in recent weeks: WMSN-47, KJTM-38, K45AY, Jonesboro, AR, KIOA-15, K56## with PTL, and WETO-39. To the best of my knowledge the channel 56 NEVER ID's, but I think they are from southeast Kansas or southwest Missouri. K52AY is another LPTV that never ID's. The way things are going the FCC is going to deregulate us right back into the pre-FRC era.

After recently learning that my Zenith N1310 would be incapacitated awhile longer, I ordered a Teknika 6510 to try out. I did not adjust its AGC. Compared to my Y1310, which is a bit less hot than the N1310, the Teknika was about the same on video, but not quite as hot on audio above channel 50. On lower channels, however, there is no comparison; the Zenith blows the Teknika away progressively more as you go down the UHF dial. On selectivity, the Zenith has a slight edge, and it is also better on handling overload. The Teknika's selectivity, however, is truly impressive all in all. It's also darn nice skipping all over the dial without twisting knobs and counting in your head all the time.

Which brings up the ICOM R7000 (with its 99 memories and digital readout). If it's specifications are to be believed, the R7000 should revolutionize TV DX'ing! A video adapter will be available for it shortly. As soon as I can sell my ICOM 745, I plan to get one. 73

Jim Pizzi, P.O. Box 1778, Lovington, NM 88260 (505)-396-3251 MST/MDT

Equipment: Tri-Ex MW-65' Tower - @ 65', 10 element Antennacraft (hor) into Akai AT-V04 and JVC VT700 with Jerrold FM de-snower; @ 68', Finco P-7 UHF dish with Eu-4s preamp into Sony 8" b&w or Motorola 19" color; @ 72', Winegard CH-7023 (10 elements, chs 7-13) with Winegard AC-9730 preamp into Motorola 19" color. 35 Foot Tower - @ 35', Winegard CH-4054 with Winegard A-215 in house tube amp into Motorola 19" color; @ 38', CM 4250 6' UHF with Eu-4s preamp into 12" Emerson b&w. 20', 10 element channel 2 with Winegard AC-9260 preamp (channels 2-6); 35', CM-1110 with Winegard AC-9990 preamp on 20' push up on garage roof; Channel 2 and FM vertical on 20' push up; Winegard CH-4054 on 10' mast; 25', 10 element Antennacraft FM (vert) into JVC VT900; 13', Winegard CH-4052 with Winegard AC-9260 preamp (chs 2-6).

April 1986

7 tr	2320	KVCT	19 TX	490	
		WNOL	38 LA	830	
		KADN	15 LA	700	
		WGNO	26 LA	830	
		KORO	28 TX	520	
		WLAE	32 LA	830	
		(0 kHz u/KTAB)			
	2347	KTHT	67 TX	530	
	2350	Houston 20,26,39			
8 tr	2200	KOCV	36 TX	100	
25 tr	2204	WGNO	26 LA	830	
		WNOL	38 LA	830	
	2206	KADN	15 LA	700	
		KAMUt	15 TX		
	2208	WLAE	32 LA	830	
		(0 kHz u/KTAB)			
	2233	Houston 20,26,39			
	2330	KMSS	33 LA	560	
28 Es	1825	unids 2-4 Mexico			

May 1986

6 tr	0837	WNTZt	48 MS		
10 Es	0800	unids chs 2-6 e			
11 Es	0930	WESH	2 FL	1346	
		WCBD	2 SC	1359	
	1056	+WMAB	2 MS	828	
	1100	WCMH	4 OH	1215	
	1330	WDIQ	2 AL	1008	
	1529	WBRC	6 AL	959	
14 tr	0750	KADN	15 LA	700	
		unids ch 16 east			
14 tr	0750	WMAU	17 MS	738	
		unids ch 18 east			
		KVCT	19 TX	490	
		(With CCI)			
		Houston 20,26,39			
		KLMG	51 TX	504	
		KLPA	25 LA	654	
		(Over KXXV-25)			
		WVSBt	27 MS		
		(10 kHz to KDFI)			
		KLAX	31 LA	660	
		KVHP	29 LA	640	
	0830	WNTZ	48 MS	720	
	0835	WMAA	29 MS	772	
		WAPT	16 MS	772	
		WDBD	40 MS	772	
		KARD	14 LA	662	
	0845	KLTS	24 LA	560	
	Es 1840	KTVN	2 NV	1008	
16 Es	2049	KOTI	2 OR	1170	
17 Es	0914	KGFE	2 ND	1058	

June 1986

6 Es	2130	CKND2	2 MB	1184	
9 Es	2119	KTVU	2 CA	1116	
10 tr	0730	Houston 20,26,39			
	Es 1800	WBTV	3 NC	1206	
		WATE	6 TN	1125	
		WCYB	5 VA	1224	
		unid ch 7 east			
		(0 kHz to KOSA)			
	2341	@WCYB	5 VA	1224	
10 Es	2355	WSAZt	3 WV		
	2356	WAVE	3 KY	1049	
	2358	WTVF	5 TN	968	
	2400	WTTV	4 IN	1059	
11 Es	0005	=WTVN	6 OH	1215	
	0016	WRTV	6 IN	1059	
		KTVI	2 MO	824	
	0730	WSB	2 GA	1098	
	0800	WCIV	4 SC	1359	
		WCBD	2 SC	1359	
	1815	unids 2-6 east			
		(Went to FM)			
12 Es	0800	WKRN	2 TN	968	
		WCIV	4 SC	1359	
		WRCB	3 TN	1039	
		WSMV	4 TN	968	
	0830	WYFF	4 SC	1206	
	1505	KGFE	2 ND	1058	
13 Es	1900	WBBM	2 IL	1040	
15 tr	0939	@KPEJ	24 TX	100	
	Es 1658	WDIQ	2 AL	1008	
		WTVY	4 AL	1067	
		WSIL	3 IL	887	
	1700	WCTV	6 GA	1148	
16 tr	0930	KPEJ	24 TX	100	
		(See Note # 1			
	Es 2015	unids 2-5 Mexico			
	2024	XEZ	3 QR	840	
		(0 kHz to KENW)			
		(XEW network			
29 Es	1100	KGFE	2 ND	1058	
30 Es	1841	KREM	2 WA		

Jim Pizzi (continued)

Note # 1 - KPEJ-24 was first day sign/on - 4572 kW visual - new tower up by KMID-2, maybe 600-800 feet high.

Some good trops seen on April 7 and April 25 and the best on May 14. E skip kind of sparse with most time spent on FM when MUF got that high. KPEJ, a power house here - snow free all of the time. KOCV, much weaker and fades a lot. Nothing much happening otherwise. Til next time, 73's, Jim

---

Fred McCormack, 135 Prairiewood Drive, Fargo, ND 58103 CDT

Equipment: VHF: Broadmoor 9" black & white, Winegard CS-4053; UHF: Teknika 6510 tuner, Winegard CH-9095, Blonder-Tongue CMA-Uc pre-amp; Alliance rotor.

June 1986

8 Es	1154	unid channel 2 s			
9 Es	2043	unid ch 2 Mexico			
10 Es	2043	unids channel 2			
	(MUF	107.9 @ 2124 -TX)			
	2205	KENS	5 TX	1220	
11 Es	(MUF	107.9 @ 1919 -TX)			
	2028	KPHO	5 AZ	1230	
	(MUF	107.9 @ 2041 -AZ)			
	2227	CFRN	3 AB	870	
	2256	CKSA	2 AB	730	
15 Es	1643	unid ch 3 ABC			
		unid ch 2 Mexico			
	1657	KENW	3 NM	965	
	1700	KPRC	2 TX	1195	
	1730	KBTX	3 TX	1120	
	1759	KUTV	2 UT	880	
	1803	unid channel 5			
15 Es	1841†	CFRN	3 AB	870	
	1842	unid ch 5 Canada			
	(MUF	100.9 @ 1850 -AB)			
	1900	CBXT	5 AB	860	
	1911	CBXAT2t	2 AB		
	1937	KREM	2 WA	960	
	2058	KLEW	3(WA)	960	
	(MUF	106.1 @ 2123 -ID)			
	2204	KBCI	2 ID	960	
	2234	KIDK	3 ID	804	
17 Es	1925	unid channel 2			
19 Es	1958	WMAB	2 MS	1015	
24 tr	0542	KSHB	41 MO	550	
	0543	KETV	7 NE	385	
	0545	KPTM	42 NE	400	
	0548	KMEG	14 IA	300	
	0551	KZKC	62 MO	550	
	0553	KOLN	10 NE	420	
21 tr	0554	KSIN	27 IA	300	
	0556	K25AA	25 IA	245	
	(Rock Rapids			KSIN-27)	
	0558	KHIN	36 IA	390	
	0622	KTIN	21 IA	300	
	0625	KCAU	9 IA	300	
	0634	KUSD	2 SD	265	
25 Es	2059	KJRH	2 OK	750	
	2205	KFDXt	3 TX		
	2213	KFSM	5 AR	795	
	2214	KTBS	3 LA	990	

July 1986

2 Es	2353	unid ch 2 ABC se			
8 tr	0029	KCAU	9 IA	300	
11 Es	1123	unid ch 2 XEW			
	1259	KNAZ	2 AZ	1120	
	1300	unid ch 3 sw			

Here in Fargo it was a very dead month for E skip. However, the few really fine days more than made up for rest of the days. I didn't log any new television stations, but I had a lot of fun with FM during those intense openings.

The opening of the 11th was without a doubt one of the finest I have ever seen. Unfortunately I was at work all day and had to forego many hours of DX'ing. I first discovered the opening in the CATV headend at my office before 1000. I checked its progress whenever I could throughout the day and noted that it continued throughout the day and often times overrode locals KXJB-4 and WDAY-6 (not on the CATV - only with the search antenna turned away from the locals). When I got off work at 1800 during the entire 45 minute commute to my home, FM E skip was heard up to 107.9 MHz on the car tuner. I was sure that after so many hours of E skip I would not be able to partake at all, but as luck would have it; the skip, all the way through FM, continued for another two hours after I got home.

The opening of the 15th was also joined in progress and turned into the finest Alberta E skip ever noted here. Again, I found myself drawn to the FM (I watch the TV too!) and managed to move my FM loggings from that province from a total of 0 to a total of 10.

Hopefully, there will be a couple of nice E skip openings still to come in July, but I don't know - one positive ID in the first 11 days must make this the worst July yet for me. I am also anxiously awaiting some tropo. I am really concerned that the buildings constructed areound me in the past year are having an adverse affect. The opening on the 24th was nice.

13 WTHR INDIANAPOLIS

TELEVISION NEWS

Bill Fahber, editor
336 Atlantic Street
Bridgeton, NJ, 08302

APPLICATIONS FOR NEW TELEVISION STATIONS

CH	ERP	HAAT	STAT	CITY/APPLICANT
26	100	139	HI	Hilo; Pavilo Broadcasting
10	1	226	HI	Lihue; William Gault (not a Thurman application, that I know of.)
21	5000	738	MN	Duluth; Greater Duluth Bc'ng.
31	22	1011	OR	Klamath Falls; Garcia Commu's
40	5000	534	WV	Bluefield; Blue Sky Broadc'g.
40	1110	1992	WV	Bluefield; Living Faith Ministries Inc.
64	1000	729	VA	Charlottesville; Commonwealth Broadcast'g Corp.(amended)
64	5000	257	VA	Charlottesville; George Walton Lindsay
15	8.89	951	VI	Christiansted; Franklin D. Graham
15	3300	1163	VI	Christiansted; Santa Cruz Bcg
15	8.93	943	VI	Christiansted; Wm. L. Zinsky
48	5000	1162	MA	Worcester; Evangel Schools
39	5000	1161	NV	Paradise; Goldhill Broadc'ng.
39	5000	1519	NV	Paradise; Nevada Broadcasting Group.
39	1445	1172	NV	Paradise; Nevada 39 Inc.
39	5000	522	NV	Paradise; Puamehana Ltd.
39	5000	1532	NV	Paradise; Wynn Communications

APPLICATIONS DISMISSED

CA Eureka; ch. 29; Pacific Television Inc.
FL High Springs; ch. 53; High Springs Television Inc. (joint request for settlement agreement).
FL Inverness; ch. 64; West Florida Television Ltd. (as per petition by Meredith Corp).
NV Reno; ch. 11; Silver State Telecasters (at its own request).
TX Katy; ch. 51; Inter-American Broadcasting Company (as per petition by Johnson Broadcasting).
CA Paradise; ch. 46; Garcia Communications.
FL Clermont; ch. 68; Robin C. Brandt; CFL Ltd.; Olympia Broadcasting Group Ltd. (joint request for settlement agreement).
FL Marathon; ch. 9; Florida Educational Television Inc. (joint request).
ME Lewiston; ch. 35; Channel 35 Lewiston ME; Minority Women's TV Coalition.
MI Battle Creek; ch. 43; United States Broadcasting Corporation (failure to prosecute application); Polaris Television Ltd. (at its own request).
MS Holly Springs; ch. 40; Mid South Broadcasting Inc. (Joint request).
NY Syracuse; ch. 56; New Era Broadcasting Inc.; Tureaud Broadcasting (joint request).
TX Brady; ch. 13; John R. Powley (joint request for settlement agreement).
TX Wolfforth; ch. 22; Garcia Communications (joint request for settlement agreement).
VA Danville; ch. 24; Haughton Television (failure to prosecute).
MT Butte; ch. 18; Montana Western Corp.
PA Bethlehem; ch. 60; Ashford Communications Inc.; Haughton Television.
TX McKinnville; ch. 32; Warren County Broadcasters.
TX El Paso; ch. 38; El Paso County College District (at its request).
TX El Paso; ch. 65; Liquico Television Ltd. (at its request).

CONSTRUCTION PERMITS GRANTED

CH	ERP	HAAT	STAT	CITY/APPLICANT
67	100	1000	AL	Troy; Shelley Broadcasting Co.
46	5000	1600	CA	Paradise; Butte Creek Communications Company
13	316	1030	TX	Brady; Kimbell TV Company
9	186	276	FL	Marathon; Marathon Educational Broadcasting Inc.
22	674	219	TX	Wolfforth; Randy Chandler Ministries (summary decision)
18	2525	1898	MT	Butte; Community Christian TV
38	1000	1828	TX	El Paso; St. Clement's Episcopal Parish School, Inc.

CONSTRUCTION PERMITS CANCELLED

WV Parkersburg; WOWB, ch. 39

CONSTRUCTION PERMITS REINSTATED

NC Goldsboro; WYED, ch. 17

CONSTRUCTION PERMIT MODIFICATION APPLICATIONS

CH	ERP	HAAT	STAT	CITY/APPLICANT
34	156	419	KS	Salina; KMCT
46	5000	1948	NC	Belmont; WMHU
30	1100	1168	OH	Portsmouth; WUXA
8	166	1208	PA	Johnstown; WTHX (now WWCP-TV)
28	4466	2129	CA	Groville; KCBO
56	1353	1003	IN	Gary; WDAI; chg to educational station.
48	64.3	811	PR	Ponce; WIDE
7	44.1	816	MT	Bozeman; KCTZ
16	2630	446	MT	Great Falls; KTGF

CONSTRUCTION PERMIT MODIFICATIONS GRANTED

CH	ERP	HAAT	STAT	CITY/APPLICANT
33	42.5	647	NY	Utica; WTUV
23	500	438	FL	Panama City; WDGH
34	156	419	KS	Salina; KMCT
17	2600	1576	NC	Goldsboro; WYED (reinstated)

APPLICATIONS TO CHANGE EXISTING FACILITIES

CH	ERP	HAAT	STAT	CITY/APPLICANT
22	3830	1430	GA	Savannah; WJCL (CP)
9	316	1525	OK	Oklahoma City; KOTV (CP)
33	42.5	647	NY	Utica; WTUV (STA; temporarily off the air)

FACILITIES CHANGES GRANTED

AR Little Rock; KARN, ch. 2; granted CP to change from 100 kw to 100 kw max ERP; 1781' AAT/1775' AG/2047' ASL (same TL, but 225' lower).
PA Scranton; WDAU-TV, ch. 22; granted CP to raise ERP from 1381 kw max to 2945 kw max; 1657' AAT/815' AG/2915' ASL; same TL (97' higher AAT; 243' higher AG; 217' higher ASL, whichever you believe).
AZ Phoenix; KTVK, ch. 3; granted CP to change from 100 kw to 100 kw max ERP; 1670' AAT/176' AG/2838' ASL (52' lower); same TL.
MO Springfield; KOLR-TV, ch. 27; granted CP to change ERP from 1580 kw max/646 kw hor to 5000 kw max; 1688' AAT/1592' AG/3147' ASL (24' lower than existing); same TL.
LA West Monroe; KARD, ch. 14; granted CP to raise ERP from 1050 kw max/938 kw hor to 5000 kw max; 1876' AAT/1888' AG/2008' ASL; (1295' higher ASL); TL 5.5 miles west of Columbia, 1.5 miles south of hwy 4; co ordinates 32°05'41"/92°10'39"; Az 183°, 28 .39 miles from present TL.

CALL LETTER APPLICATIONS: NEW STATIONS

CH	C.L.	STATE/CITY/APPLICANT
14	KWHE	HI Honolulu; KDSC -TV
55	WHKE	WI Kenosha; WKRN-TV
32	KPCS	CO Pueblo; tvUSA/Pueblo Ltd.
11	KFNR	WY Rawlins; KRWY

CALL LETTER APPLICATIONS: CHANGE EXISTING

CH	C.L.	STATE/CITY/APPLICANT
47	KWHB	OK Tuls a; KTCT

CALL LETTERS GRANTED: NEW STATIONS

CH	C.L.	STATE/CITY/APPLICANT
27	KWEW	CA Coalinga; Western Educational Coalition
46	KBCP	CA Paradise; Butte Creek Communications Company
63	WPPB-TV	FL Boca Raton; Pa lm Beach County Educ ators Broadcasting Inc.
61	WGBZ	FL Gainesville; G ator Broa dcasting Ltd. Partnership
14	KJHL	KS Pittsburg; John H. Leland
10	KWNM-TV	NM Silver City; KOAT Television
23	KHCE	TX San Antonio; Hispanic Community ETV Inc.
8	WWCP-TV	PA Johnstown; WTHX
28	WHBL-TV	WI Sheboygan; WMRW-TV

CALL LETTERS GRANTED: CHANGE EXISTING

CH	C.L.	STATE/CITY/APPLICANT
26	KSHO-TV	HI Honolulu; KSHO
4	KMOV	MO St. Louis; KMOX-TV
23	WWPC-TV	PA Altoona; WOPC (I can see confusion ahead with WWCP-TV in Johnstown.)
11	KARE	MN Minneapolis; WUSA (as of 6/11)
9	WUSA	DC Washington; WDVM-TV (as of 7/4/86)

NEW STATIONS ON THE AIR

IA Ottumwa; KOIA-TV, ch. 15+, went on the air 6 /2/86; 166 kw max ERP; 410' AAT/417' AG/1157' ASL; TL 3.4 miles SSE of intersection of Hwy 63 (Madison Avenue) and Hwy 34 (Church Street), Keokuk Twp.; coordinates 40°57'50"/92°23'50"; address: Ottumwa Television Ltd. Partnership, 107 E. Second St., Suite 600, Ottumwa, IA, 52501. No word of network affiliation, but area lacks decent coverage by any NBC or CBS affiliate.
LA West Monroe; KNCT-TV, ch. 39+, went on the air 4/7/86; 560 kw max ERP; 498' AAT/514' AG/583' ASL; TL 701 Parkwood Drive, West Monroe; coordinates 32°30'21"/92°08'54" (same coordinates as KARD-14, but 130' lower with less ERP, so coverage area should be smaller); address: Carolina Christian Broadcasting Inc., 701-A Parkwood Drive, West Monroe, LA, 71291. independent station.
AR Pine Bluff; KJTN-TV, ch. 38- reportedly signed on 6/1/86, according to the 6/15 SRDS spot data book. 5000 kw max ERP; 1945' AAT/1880' AG/2219' ASL; TL 2 miles west of Redfield (where it can reach Little Rock with a strong signal); coordinates 34°26'31"/92°13'03"; address: TVX Broadcast Group Inc., 7123 Interstate 30, Suite 54, Little Rock, AR, ?????. Independent station, operating 6 a.m. to 1:30 a.m. central time.
DE Wilmington; WTGI-TV, ch. 61z, testing on 7/3/86, with programming as of 7/9. 3000 kw max ERP; 957' AAT/949' AG/ 1024' ASL; TL to Old Vespers Road, 2.8 miles NNE of Woodstown, NJ (that is, the southeast side of Vestry Road, in the middle of a cornfield; I checked it out the other day: beautiful new tower with strobe lights that can be seen as far as fifteen miles away.); coordinates 39°41'37"/75°17'59" (18.37 miles from my QTH, making it the nearest station to me); address: Delaware Valley Broadcasters, 303 A Street, Wilmington, DE, 19801. Independent station.
VA Roanoke; WVFT-TV, ch. 27, scheduled to sign on 9/15/86.

FORUM

Richard Clark sends the following information on new stations and networks in Puerto Rico:

CH	C.L.	CITY	NETWORK	INFORMATION
9	WSUR	Ponce	Tele Once	returned 5/86
11	WLII	Caguas	Tele Once	returned 5/86
14	WTIN	Ponce	WPRV-13	new: 6/86
22	WNJX	Mayaguez	Tele Once	new: 6/86
48	WIDE	Ponce	WRWR-30	new: 2/86
54	WATX	Arecibo	WRWR-30	ex-independent

Other information from Richard: XH??, ch. 11 in Ciudad Juarez, Mexico, is a new station on the air, affiliated with Imevision ch. 13; KINT, ch. 26 in El Paso, TX, is SIN, not independent as was earlier reported; XHIJ, ch. 44 in Ciudad Juarez, is now independent, formerly Imevision ch. 13. He reports on that ch. 11 in Ciudad Juarez, "Ch 11 has not put on any local type ID call and I am not sure if Broadcasting Yearbook CP and call is correct since it is almost 20 years old." "Now to answer your last question about Ch 13 TBN Nevis St. Kitts is a 24 hours english station from Santa Ana, Calif (KTBN ch 40)." Also, HIND, ch. 13 in Santo Domingo, Dominican Republic, has been inactive for two years now.

Ed Frye, now in Los Angeles, CA, sent an article from the 6/18/86 Variety, reporting that the Corporation for Public Broadcasting has purchased a transponder on Westar IV, which it had been leasing. This will save CPB stations $2500 each in interconnection fees to National Public Radio. Ed also mentions that the Los Angeles Times has yet to include KIHS-46 in its TV listings.

While we're in the area, let's drop in on W.R. McIntosh. From the 6/17 Los Angeles Times, a classic: "This is how low budget the Nustar Television Network is. One night, after the new, Tujunga-based satellite broadcasting system was trying out its signal, a man called from Holmen, Wis., wanting to know what would be on next. The night watchman,

was running the studio after hours, asked him what he wanted to see, and the caller suggested 'Rage at Dawn,' a 1955 Western starring Randolph Scott. The guard obligingly rooted around in the cassettes, turned up a copy and popped it into the player. Shoestring budget notwithstanding, Nustar started broadcasting Friday with what it contends is the only 24-hour, nationwide satellite broadcasting system offering diversified programming. Nustar won't likely be confused with the Public Broadcasting Syste m. The current program list includes 'Yuk Yuks Toni ght,' 'Classified Lonely Hearts,' 'Date W ho We Tell You,' 'Hollywood Asylum,' 'Garage Sale for the Rich and Eccentric,' 'This Week in Real Estate' and 'Discover the Martial Arts.' Its program director says Roller Derby may be added too." "Nustar's goal is to persuade the nation's 401 commercial UHF stations and another 141 low-power outlets to carry its shows.... So far, the network has a single affiliate, in Boston." The station" WVJV-TV, channe l 66 in Marlborough, MA.

The 6/12 Times reports that WNET, ch. 13 in New York (That's Californese for N-E-W-A-R-K as in Newark, New Jersey. Then again, why not? After all, they took the Statue of Liberty from us.), one of the primary producers of programming for PBS, has up to now devoted half of its budget to national program ming, but plans to focus most of its resour ces on local programming. WBGH-2 in Boston and KCET-28 in Los Angeles are two other large producers of national programming for PBS.

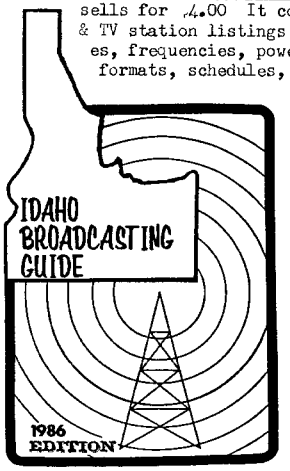
In the 6/15 Times, an arti cle on KS CI-TV, channel 18 in San Bernardino, which ca rries programs in 14 languages. "KSCI's unor thodox approach to broadcasting - based on a s earch for unfilled niche s, tolera nce of a fragmented station identity and readiness to sell air time to the highest bidd er - has a lmost by accident given it a major role in the cultural life of many of the region's immigrant communities. It is the predominant outlet for Asian-language television." "K SCI is a for-profit commercial station owned by the World Plan Executive Council, a Washington-based nonprofit organization founded to propagate Maharishi's technique of transcendental meditation, but the guru has no control over the station.... When KSCI first went on the air in 1977, its call letters stood for 'Science of Creative Intelligence' - another name for Maharishi's teachings - and the World Plan Executive Council hoped to use the station primarily 'to disseminate our educational program....'" "But the owners decided to make the station self-supporting, and station management spotted a need for television serving Southern California's large immigrant communities.... The station change the meaning of its call letters to 'Southern California International' and began selling air time to ethnic broadcasters. Videotapes of Maharishi's lectures were relegated to late-night hours."

From the 6/17 Times: an NBC researcher on Video Cassette Recorders found that they actually benefit network television. Network movies are among the most frequently recorded. 3/4 of all home recording is network TV, with the average VCR owner playing back two to three hours a week of television programs. Daytime game shows and news programs are rarely recorded. Previously, the broadcasting industry had feared that VCR use had actually cut the amount of commercial television viewing.

According to the 6/3 Times, the Supreme Court ruled that municipalities might be in violation of the First Amendment guarantee of the freedom of expression when they grant monopolies to cable television firms. Los Angeles officials will have to justify their practice of granting only one firm to serve a part of the city.

The 6/10 Times also deals with the Supreme Court, which refused to force cable companies to carry all local TV signals on their systems.

Frank Aden has completed his 1986 edition of the Idaho Broadcasting Guide, which sells for $4.00 It contains AM, FM & TV station listings with addresses, frequencies, powers, networks, formats, schedules, owners and other information. It also include FM and TV translator information. You can write for it at: Idaho Broadcasting Guide, c/o Frank Aden, Jr, PO Box 2082, Boise, ID, 83701.



Frank also writes, "Interesting news about Cascade's opposition on TRC's approval for ch. 9 in Caldwell. Seems no one around here knows anything about it, including officials in Caldwell. I also found out neither Cascade or TRC have applied for the proper local business licenses. Another thing is TRC never applied for a use permit from the Forest Service for a transmitter site on Deer Point! This means we are looking at least a year before anything can be done. If they applied now it would be several months before it could be approved & the snow is too deep to start building on Deer Point a good portion of the year. The only new piece of information on KWHP ch. 14 is they have not applied for a use permit on Deer Point either. The people at the Forest Service told me they are very surprised neither ch. 9 or ch. 14 have applied by now. They said KWHP would have probably been approved if they applied for lower power. No answer from Matlock on KWHP or KMCV ch. 20 so I have written to the FCC. From seeing the

lack of progress Matlock has made with all their stations & their ignorant responses to my phone calls I get the impression they do not know what they are doing (or have the finances)." It sounds like you're experiencing the same thing I and others have: once a person receives a construction permit, he or she will say virtually nothing about the station to the press or to the public. And if asked, they treat you like a spy. Your statement that the Forest Service reviews new applications to see if there are any interference problems is interesting. Is this yet another example of local governments taking it upon themselves to usurp the FCC's authority?

"I should explain why Deer Point is so important to TV & FM here. It is the only location in the Boise Mountains that has power available at the right altitude. It would take a million $ project to install a new power line to one of the other peaks. There has been some talk about constructing a new location in the Owyhee Mountains in a few years (to the SE of Boise) where power is available nearby. When KWHP was turned down by the Forest Service for their original application, Matlock mentioned putting up a tower in the valley near Star. The problem with this is it would be almost impossible to compete with the stations on Deer Point. A good example of this is KLCI FM who tried to get a use permit for Deer Point & was turned down. The station was using a tower a few miles east of Caldwell & just could not get the coverage needed to compete with the FM stations on Deer Point. After unsuccessfully trying again this last spring to get a use permit (the FCC did approve a power increase & new transmitter site) the owners shut the station down. Deer Point is now close to the maximum number of transmitters allowed by the Forest Service so as to keep interference levels acceptable." Again I ask, What business is it of the Forest Service if there is an interference problem? That is solely the responsibility of a commission established some fifty years ago by an act of the Congress of the United States.

"All of the letters to the Chamber of Commerces on LPTV's have turned up negative except Twin Falls. K49AZ will be on the air 7-14-86 as a locally ran independent.... Their transmitter will be on Flat Top Butte (same as KMVT ch. 11) & will be running 1kw, they did now know what their HAAT is. K66CE in Lewiston has been on since 1984 & addition to running PTL (WDLI) they also have TBN & INN."

"One of the problems I am running into is the bad information appearing in BROADCASTING. Several changes for this area (especially for FM) have been listed incorrectly such as mixing stations up on call changes.... Another problem is getting bad information from the stations themselves. One local FM station told me they had been approved for higher power & a new frequency plus a use permit for a transmitter site on Deer Point. They insisted this was so even after I told them I saw a FCC release reporting it as denied. I checked with the Forest Service & they told me the station had not even applied for a use permit!"

With that last comment I would like to bring up the issue of source reliability. It seems that even the most reliable sources have glaring errors. And I include the Table of Channel Assignments in the Code of Federal Regulations as published by the U.S. Government Printing Office. It mistakenly included FM channel assignments, TV assignments that simply could not exist (like ch. 55 in New Haven CT and in Riverhead NY.). Carrier offsets differ in a few cases with data bases, and the data bases make more sense. Where data bases and Television Factbook/Digest differ, I have to seek a third or fourth source to resolve the problem. Network lists from the Factbook, SRDS and Television Almanac often differ. Since many sources appeal to the commercial market, they become sloppy in identifying a station with the largest city in its coverage area instead of its community of license. Newspaper articles are a major source of bad information, since reporters generally don't know what they are talking about, and the public doesn't know the difference. One other problem deals with reports from club members. On occasions a viewer might make a correct observation but come to a wrong conclusion. One member logged a station with a CBS program, and reported that the station was a CBS affiliate. It turned out that the station merely broadcast a program which the local CBS affiliate pre-empted. Many members used to mistake offset frequencies by lack of knowledge of CCI patterns. Some years ago I raised the statement that 20 kHz CCI normally produces fewer hash lines than 10 kHz, and that 0 kHz can also produce several lines. But up to that time people were reporting wrong offsets. It is because of problems with reports from club members that I like to learn their source of information. It does not mean that I doubt either their honesty or their accuracy.

One totally unimportant issue is whether a station off the air for some years still has a license or not. I know of several stations off the air for some time that still have licenses. I know of others who let them expire or turned them in to the FCC. One issue that was raised dealt with WTHS, ch. 2 in Miami. A few years one member reported that the station operated only during the daytime when school was in session, then shut down for the summer. It wasn't until last month that Glenn Hauser reported that the station is off permanently. Glenn now writes, "I just talked to some people at WPBT, the fulltime licensee of ch 2 in Miami, who told me it's been that way since January 1983. The former WTHS sharetimer became WLRN, which is now fulltime on ch 17. Thus it seems highly unlikely they also still hold any license for ch 2. I'm not getting any answer on their toll-free lines this afternoon to research their version, and don't want to devote a lot of time or expense to long-distancing them, since in all probability they will tell me the same thing. Perhaps you will want to contact them yourself if there is any remaining doubt that there is any such thing, any more,

as WTHS ch. 2. Also, I found it rather odd that a TV Guide via someone else was necessary to 'tend to confirm' what I said--after all, I get the local TV Guide every week, watch both WLRN and WPBT extensively, and have lived here two years, so I might be fairly familiar with the situation.... Perhaps your FCC database, or wherever you got the info about WTHS-2, is a bit outdated." In a few instances, I have found outdated information in it, but in your work with shortwave, I'm sure you have often been plagued by wrong information from reliable observers. Seeking out a third source doesn't hurt anybody. Only God himself doesn't need confirmation, but I doube he's interested in joining the WTFDA.

Marty Barvinchak in Glenshaw, PA, sent in an article from the 5/22/86 Pittsburgh Press, about WQEX-TV, ch. 16. "Ken Tiven, WQEX-TV's new station manager, has a tiny office in the bowels of the concrete bunker that houses WQEX and its sister station, WQED." "WQEX was knocked off the air last March when its ancient transmitter finally gave up the ghost." (I wish WNJS-23 would give up some of its ghosts. You should see them on the picture tube. If it ever aired 13 Ghosts, you could see all thirteen at once.) " That gave metropolitan Pittsburgh Public Broadcasting, the umbrella organization that runs WQED-TV, WQED-FM, WQEX and Pittsburgh Magazine, the forced opportunity to rethink its use of WQEX. Sister stations are a valuable commodity in the public broadcasting world...but WQEX's weak signal and black-and-white transmissions had severely limited the station's usefulness. The decision was made to bring the station back in color, with a full signal and a new manager, Tiven." "Tiven is determined to pull WQEX out of the shadows of WQED's success. 'We had equal billing on the television cameras, but the station never had equal billing, really. Now it will have its own purpose and identity.'"

Ronald Purdue in Byron, MN, comments on Satellite scrambling: "The scrambling is here to stay and of the 100 currently available channels, only about 34 are actually going to scramble." "There will be scores of new satellite channels aimed at the home TVRO that will never scramble and will be advertiser-supported. Some of these new channels will show current movies like HBO, Showtime, etc. do now." "There are now 5 of these channels up on satellite serving the home TVRO. I would think that people should not even be scared of buying a satellite dish! I wonder just how many club members now have a satellite dish?" I think you're right about there being no reason for alarm. I think the dish dealers are looking for a scapegoat to blame their drop in sales. Did they ever think that maybe most of those who want one and can afford one already have one?

From the 5/31 Rochester Post-Bulletin, sent in by Ronald: "The Dederal Communications Commission this week selected a low-power television corporation from St. Paul to begin broadcasting in Rochester. The firm, Ebonite Corp., will broadcast on Channel 65 andis planning to construct a 275-foot transmitter tower in Haverhill Township. According to its application to the FCC, Ebonite plans to produce local programming. 'It is not the intention of the applicant to rebroadcast the signal of any primary TV station,' a company official said. Plans call for an advertising organization, with movies, news and sports as well as programming for adults and children. Ebonite said in its application that its broadcast plans will enhance the quality and variety to the public. The signal wouls reach a radius of 10 to 15 miles from the transmitter tower. The service area would include all of Rochester and Simpson, Chester, Viola, Potsdam, Douglas and Elgin." One of the five owners of the station is Jean Goins. "Ebonite Corp. won out in a low-power lottery over..." listing several applicants, including L.E.O. Broadcasting. "The owner of competing L.E.O. Broadcasting is N. Walter Goins, son of Ebonite's Jean Goins...." "He said he is going ahead with previous plans to build another station, KXLT, in Rochester on Channel 47, which he hopes to have operating by the end of August. 'I have all the approvals I need for Channel 47,' he said. 'I plan on being ready to go this fall.' That station would not be an official low-power station, but he has previously stated it would probably serve only the city of Rochester, while retaining the potential to serve southeastern Minnesota from a tower northeast of Rochester. KXLT would rebroadcast programming from his St. Cloud station, which has been operating since 1982."

Rich Turcsany in Fairfield, CT, sent in lots of information. New LPTV station W13BF in Hartford, CT, is on the air in Italian, Spanish and Polish; no English. New stations under construction:

- KUFT-29, Hobbs, NM (to be independent)
- KITU-34, Beaumont, TX ("although an educational assignment, this station will be a Trinity Broadcasting Network (TBN) outlet - the first of many noncommercial stations that TBN plans to activate as Christian stations")
- WCLJ-42, Bloomington, IN (to be owned byTBN)
- WVCI-TV-61, Bay City, MI (to be independent)
- KABB-29, San Antonio, TX (to be independent)
- KTGF-16, Great Falls, MT (to be NBC)
- KO6KZ, ch. 6, Junction City, KS (LPTV)

"WWHT-68 Newark NJ has now added wrestling and the 'Golden Years of Television' to its music video format, but the format may not last for long - Wometco has put both WWHT and WSNL-67 Smithtown up for sale.... WNYC-31 has now increased power to 2800 kw, signal's very good here in Fairfield (better than WWHT). WHCT-18 Hartford is still operating at 547 kw until the new transmitter site is completed - they're showing 'The Rocky Show' wee knights at midnight in case you see a cartoon on 18 (a tribute to the programming tastes of KXLI-41's N. Walter Goins?)" It could be worse. Let me know if they start airing "Morning Stretch" after the evening news. "WSTG'64 Providence (which first aired in December 1981 with a format of public domain movies and old Three Stooges cartoons) will soon be owned by Sudbrink Broadcasting

(the new owners of Richmond's WTLL-63, now WVRN). Expect a big change in its programming this fall!! WCCT-20 Waterbury and WPXT-51 Portland are not on yet, WTWS-26 New London should be hitting the air sometime in the next few weeks. Two corrections to my last letter - WTJ... (now WWCP-8) Johnstown PA (including satellite WWPC-23 Altoona) and KPEJ-24 Odessa TX plan to operate as indies, not ABC affiliates: KSCH-58 Stockton CA has been running a lot of old network shows, including a few shows you don't get to see elsewhere in sycdication these days. These include 'Dracken's World,' 'McNamara U.S. Treasury,' and 'Kong Kong' (an ABC series that aired in 1961-62)." "KVVU-21 Las Vegas NV will become a full-time indie in September (video music being dropped)."

My spacing problem is getting worse as I type this column. As it stands now, I'm typing this with the left side of the typewriter propped up on two books. Other than that, everything I'm typing is on the level. I'm definitely taking this back to the shop next week and expecting them to fix it right.

Before I get to the rest of the mail and other articles, I want to raise the issue of a future TV station guide. To the best of my knowledge, nobody in the club has any plans on producing one, and the last edition was more than six years ago.

Hopefully by the WTFDA convention which will take place about the time you receive this copy of the VHF-UHF Digest, I will have completed and updated a list of United States stations by channel, state, city with technical data, and another list by state, city, channel with network and offset. Being of computer spreadsheet and word processor, future updates should be easy and frequent. I'm hoping to finish Canada, Latin America and the Caribbean/Atlantic islands, and a set of maps by the end of summer, but might not get them done by then. Once September comes, I will probably resume college in the evening and will have very little time, if any, to do any additional projects or DX'ing. As it stands now, I have been devoting more time than I should to getting the United States lists updated and accurate. I have let other projects go, haven't done much in the way of DX, havent sent reception reports to stations, haven't sent DX reports to John Zondlo, haven't done anything else for several months except this column and the lists.

But at the convention I hope to discuss the possibility of starting up a regular TV station guide with what I can provide, and in future years build it up to what it once was. No doubt it will suffer at first from stale Mexican and Canadian information, but it could be a start.

Meanwhile I know that some club members have been upset at me for not taking the opportunity to write to them. I haven't had the opportunity to do much at all.

David Sinclair sent in some articles. Here's a winner from the 5/7/ ... about New Mexico television stations. "... in ... he decided to increase viewers by instituting the ... station ...stakes. It mailed coupon books to the public, and announces lucky numbers three times daily. The winner, upon hearing his number mentioned, has 30 minutes to call the station. KOAT was forced to come up with its own game: announcing code words over the air, then calling phone numbers at random. If the party they call can give the code word, they win. KGGM, now wanting to stoop so low as to have lotteries or sweepstakes, came up with its "Watch what you want and win" campaign: They would announce KOB's numbers and KOAT's code words as public service announcements. ... filed an unfair trade practices suit against KGGM.

From the Winnipeg Free Press, 5/9/86: "The Canadian Radio-television and Telecommunications Commission approved a "license" to Western Manitoba Broadcasters Ltd. to operate on ch. 13 in Winnipeg, its last remaining VHF allocation. In doing so, the CRTC dismissed an application by CKND owner Izzy Asper for an educational station. "The president of Western Manitoba Broadcasters, Stuart Craig, said it hasn't been determined when the new station will go on the air but he expected no trouble in meeting the CRTC's operational September 1987 deadline."

From the 6/3 Winnipeg Free Press: "A Winnipeg physician fed up with TV violence is proposing to establish alternative programming for Manitoba viewers and he's seeking $150,000 for the project. Dr. Percy Barsky, a University of Manitoba pediatrics professor, says shows such as Hill Street Blues and A-Team have spawned an 'epidemic of violence' since 1960, and he hopes to expand the scope of the closed-circuit station in the hospital to provide alternative viewing. Called CHTV Channel 4, the hospital's station offers alternative children's shows and films on medical instruction within the institution. Barsky, 65, the hospital's director of home care, says the station would offer non-violent dramas and instruction on preventive health care, possibly via cable stations."

David writes, "About your item...about stereo television in Canada; I telephoned the Vancouver office of the CRTC and was advised that the CRTC does not have a formal policy for stereo television and they have no information documentation etc. they could provide me. The CRTC advised me also that stereo transmission is up to individual stations. But local station CKVU-TV advised me that they are transmitting in simulated stereo and will be transmitting in full stereo this fall." "I wish to advise of an interesting item I just heard on television, from KTBW-TV Channel 20, Tacoma. On the Praise the Lord program, Dr. Paul Crouch advised that they had just received word from the FCC that the FCC had granted eight television permits on the same day, an FCC record, and all these eight permits are granted to the Trinity Broadcasting Network." Most likely they meant eight in one day to the same applicant. Each time the FCC has a lottery for LPTV, I would guess about fifty to a hundred permits could be granted. That is my guess, but eight sounds rather small for a record.

FCC FM NEWS

Bruce F. Elving, Ph.D.
241 Anderson Road
Esko MN 55733-9413

New FM Station, Translator Grants

AK Scammon Bay (NW Bethel, on ocean) K220BO *91.9; translates a new station to
AZ Cottonwood K237CF 95.3 (KIHX 106.3 on 88.1 in Prescott Valley) be
CA Desert Hot Springs K215BA *90.9 (KCRW 89.9 Santa Monica) ask AK
CO Durango K208BG *89.5 (KSUT 91.3 Ignacio)
CO Garfield (w. of Salida) K228CP 93.5 (KVLE 102.3 Gunnison)
HI Haleiwa K204BB *88.7 (KHPR 88.1 Honolulu)
ID Pocatello K249CM 97.7 (KLCE 97.3 Blackfoot)
MN Clara City K224-- 92.7 (KCGN 101.5 Ortonville)
NY Utica W220AF *91.9 (WRVO 89.9 Oswego; FCC said it will be on 97.7; but calls they gave are for 91.9, so I assume 91.9 is correct)
ND Devils Lake K218AV *91.5 (KFJM-FM 89.3 Grand Forks)
OH Cincinnati *90.1 5700 horizontal; 5000 vertical; 385' $, g, Family Stations
OR Bend K221CQ 92.1 (KXIQ 94.1 Bend)
OR Eugene K272CL 102.3 (KZAM-FM 95.3 Creswell)
PA Forty Fort W261BX *100.1 (WRGN 88.1 Sweet Valley PA; is WRGN stereo?)
SD Green Grass (N. Eagle Butte) K213AV *90.5 (KILI 90.1 Porcupine)
SD Whitehorse (NE Green Grass) K220BQ *91.9 (KILI)
WA Ellensburg K292DQ 106.3 (KXDD 104.1 Yakima)
WY Jackson K285CY *104.9 (KRIC 100.5 Rexburg ID)
WY Lander K203AU *88.5 (KUWR *91.9 Laramie)
ON Toronto *90.3 $, c 3500 h,v; CBC-French

Call Letters Changed or Granted

AL Russellville 97.7 WZMX
KFPW-FM; AM is in Ventura CA!
AR Fort Smith 100.9 KBBQ-FM (KFPW-FM); AM is in Ventura CA!
CA Roseville 93.5 KDJQ (KPOP); still r
FL Daytona Beach 101.9 WORZ (WCFI); Z-102
FL Marathon 97.7 WWFF ["95-INZ"
FL Miami Beach 94.9 WINZ-FM (WSST);/
FL Perry 105.5 WNFK (WPCI)
FL Tampa 100.7 WUSA-FM (WIQI), "W-101"
IA Ottumwa 97.7 KOTM"-FM" (KLEE-FM)
LA Abbeville 104.9 KROF-FM (KASC)
ME Portland 97.9 WWGT (WJBQ)
MI Charlevoix 105.9 WKHQ-FM (WKHQ"-FM")
MO Gordonville 99.3 KCGQ (KJAQ)
NV Reno 101.7 KSXY (K-Sexy?)
MO Montgomery City 103.9 KDMC (KVCM)
NJ Camden *106.9 WKDN (WKDN"-FM")
NY Hempstead 98.3 WMGG (WKJY)
ND Rugby 95.3 KZZJ"-FM"
OK Alva 94.3 KTTL (KTIJ)
OK Oklahoma City 104.1 KMGL (KOMJ); affects one translator
PA Bellefonte 95.3 WWZW
PA Greensburg 107.1 WPNT (WOKU)
TX Bastrop 107.1 KLIO"-FM" (KELG-FM)
UT Provo 94.9 KBNG (KLRZ) [Fisher WV)
WV Petersburg 101.7 WELD-FM (AM is in/
ON London 103.1 CIQM, m[-o-r] music
ON St. Catharines 97.7 CHTZ (CJQR), r, "97-Hits FM" (very strict; our reporter never heard calls mentioned in a long period of listening)

Deletion

TX Denison KACU *89.7 (not on FCC list anymore and confirmed by phone as off the air, most likely for good)

OFF THE AIR

IA Boone KWBG-FM 98.3, but station being sold—to be r, with new call letters

Stereo, or to be Stereo ($)

AZ Phoenix KFLR-FM *90.3
AR Little Rock KUAR *89.1
FL Bradenton WJIS *88.1, "Joy-88"
FL Mary Esther WYZB 105.5
FL Tampa WBVM *90.5, g[ospel] music, preaching
GA Carrollton WWGC *90.7, "They have been mono for a long time, since at least 1982 . . . . . playing heavy, heavy metal"
IN Carmel WHJE *91.3 "Students helped raise money and finally new equipment was purchased—on 24 hours as usual"
IN Connersville WCNB 100.3 "I'm sure I told you they were in $ two years ago"
IA Mason City KNIQ 93.5 r, also see "SCA"
MI Port Huron WNFA *88.3 g, signing off 1656 EST
NY Cobelskill WITU 103.5
TX Weatherford KADE *89.5, "Very good signal and clean sound for 370 watts!"
BC Kamloops CHRK 97.5, "They have a very STRONG signal as they come from a very small antenna on a high hill. . . . . that's an odd town as it's about 16 km long and 1 km wide, all in a valley of two rivers. The hills are like huge dunes and the towers are all on one of them, SW of the city centre. The stations BOOM in better than any I've heard anywhere. Cable FM is also big there—ws heard CHQM-FM Vancouver in a store and the lady said 'Oh, yes, they're on cable and everybody listens to them'!"

NOT IN STEREO-DELETE $ LISTING

IA Des Moines KDMI 97.3

FMistakes—10th ed. "FM Atlas"

AL Dothan p. 91, 95.5 is WTVY-FM (not WIBY)
AK Kenai p. 91, KGTL at 100.9 (not 100.5)
AK Mt. Point p. 91, KRBDt (not KRBBt)
AK Nome KICY-FM p. 91, 100.3 (not 100.9)
CA Part I, translators of KCHO Chico 91.7 (not 91.1); affects Chester 88.3, Marysville 91.9, Quincy 90.5, Red Bluff 91.5 and Redding 90.7. KCHO now cj (not cr). The translators in Marysville and Red Bluff said to be going off the air due to KCHO's rise to power, but I'll wait to hear if they actually go off before considering them deleted.
CO Denver KCFR *90.1 missing p. 130, is $, 910' 50000 v; P
CO Eagle p. 66, 102.3 KVEEt (not KREXt)
CO Greeley KGBS 96.1, p. 142, dual city ID with Fort Collins, not Frot Collins
FL Harbor Beach p. 97, WWTM delete listing (is in Michigan)
GA Cumming p. 132 misspelled, WWEV *91.5
GA p. 31, top of map claims NC on pp. 26-27, when it's actually 28-29
GA Tifton p. 149 WSGY is 1005', not 10005' ("I'd love to see the coverage map for that one"—primary coverage at 100 kw would be about 75 mi., if I could extend the curves off the FCChart, ed.)
MN Benson p. 105, KSCR town missing
MN Rushford p. 48 delete KLSE *91.7 (has permit to move to Rochester MN)
MS Jackson WJSU *88.5 p. 106, not SJSU
NV p. 68 KILA translators in Alamo, Caliente and Hiko add * symbol
NM Farmington p. 65, 103.1 KTDBt add *
NY Albany WGNA 107.1 slogan listed twice, p. 162
NY Brockport p. 109, WBKT *93.3 (not 93.5)
NY Ithaca p. 18, WORWt 107.7 (not 107.1)
NY Oswego p. 129, 89.9 WRVO (not WVRO)
NC Sanford p. 131 (not Samford), WDCC *90.5
NC Wilson WRDU 106.1 p. 159 list as WILSON-Raleigh-Durham, not WILMINGTON-etc.
OH Cleveland WCRF 103.3 p. 41 add *
OH Johnstown name missing from p. 112, WZZT
PA Huntingdon p. 155 *103.5 WKVR (not WVKR)
SD Mission KGGGt p. 115 shows 98.3; p. 52 shows 92.1; is 98.3.
SD Sioux Falls p. 115 KCFS 100.1 remove *
TN Germantown WEZI 94.3 missing from p. 138, is $, 300'; 3000 v, I
TX Denton 106.1 KTKS not on p. 61 map
TX Plainview p. 131, *90.7 KDTD (not KOTD)
VA Chesapeake WFOS *90.3 missing from p. 130, is $, 145', 1500 v
VA Mechanicsville WZZR 92.7 p. 119, remove $ symbol (not sure if $ or not)
WV Bluefield p. 156 misspelled, WHAJ 104.5
WV Elkins WCDE missing from 90.3, p. 130, is minus 345 feet, 1000 v
WV Parkersburg p. 130 WVPG *90.3 missing, is $, 320', 9000 v
WI Green Bay WGBP p. 130 town not BAy
WY translators of KLGT 92.7 Buffalo in Gillette, Sheridan shown as being of KLGM
AT Calgary, Edmonton, p. 122 CKO stations are n[ews] not m [29 mi. coverage
BC Invermere p. 123, CFWL-1 107.1 missing;/
MB Winnipeg p. 123, 99.1 CKO-FM7 is n, not m
NB Campbellton p. 131 CBASE 90.5 missing, is 730' 6700 v (DA) [123
NB Saint John CKO-FM10 is n, not m, p./
NS Halifax p. 144 CKDU 97.5 add *
ON Kitchener p. 147 CKWR 98.7 add *
ON Muskrat Dam CFMD 105.1 not on p. 86 map (N. Weagamow; E. Sandy Lake)
ON Red Lake p. 124 CKRE missing, 5 mi.
ON Windsor CBE-FM missing p. 130, 89.9, CBC Stereo, $, 538', 100000 v
PQ Dolbeau p. 88 CBJ-3 frequency missing, 93.1 [missing
PQ Kuujjuaq p. 81, 90.1 CKUJ calls/
PQ Kuujjuarripik p. 81 remove CKUJ calls
PQ Povungnituk p. 81 is in small type p. 81; in large type p. 89; call it large type—at 29 watts, it could be either!
NW Spence Bay p. 126 CBIQ calls missing

Formats

Networks are no longer being reported, as my decision to drop them is effective as of now. I have left the keypunch system and am temporarily without full computer capability. I am working to make my home machine do all it's supposed to do, and expect by next month to announce further changes, such as in the SCA categories. In my next "FM Atlas" I plan to explain why I've decided to drop network listings, but the reasons are basically the same as what I explained in this column several months ago. IA Ames KEZ] 104.1 b—for 3rd time!
AL Tuscaloosa WFFX 95.7 r (not p)
CA Glendale KUTE 101.9 now sj ("predominantly fusion/jazz 3 p. m. to midnight"), now ID with Los Angeles and "Cute 102" nonID
CA Porterville KIOO 99.7 m, no Spanish, no rock
FL Titusville WSCF 98.3 m [iddle of road] music
GA Ellijay WLJA-FM 93.5 kg, signs off 10 p. m.;

FCC—FM

too weak to tell if $, and no telephone listing available IA Perry KDLS-FM 104.9 r
IN Salem WSLM-FM 98.9 is g[ospel], not k
MA Chatham 107.5 to be c—expected on spring '87
MS Gulfport WZKX 107.1 r[ock]
MT Forsyth KIKC 101.3 k, "Kick-Country"
NY Rochester WZKC 98.9 r (oldies), "Classic hits . . . . . 98.9"
ND Oakes KDDR-FM 92.3 r and small-town news, monophonic
PA Ebensburg WIYQ 99.1 r[ock]
PA Philadelphia WMGK 102.9 rs (rock and soul), no nonID, uses calls with "Magic"
TN Soddy Daisy WNOO 102.3 s (not m)
TX Abilene KACU *89.7 mc (soft adult contemporary days; classical nights, some jazz)
TX Houston KUHF *88.7 cj (c days and evenings); j 10 p. m. to 5 a. m.
UT Kanab KCKK 101.1 k[ountry]
VA Cape Charles WWGH 96.1 to be r, "Wave-96," dual city ID with Virginia Beach, expects to change call letters to WIAV
WA Cheney KEYF-FM 101.1 rm, "Gourmet-101," ID with Spokane
ON Windsor CKLW-FM 93.9 r, slogan (not a nonID), "CKLW Motor City"
ON AIR AND DX READY (SELECTED)
VA Winchester WTRM *91.3 (although FCC news release said 95.3 but earlier data had it as 91.3) 1350 h, 445 v, 500', g, Stereo?

Multi-City Identifications

IL Jacksonville WYMG 100.5 adds Springfield —"Magic 100" (not strict)
IN Anderson WLHN 97.9 is with Indianapolis at times, with Muncie at times, or at times just Anderson, "Lite-98"
IN Vevay WKID 95.9 adds Carrollton KY, "96-Country" (strict)
IA Waterloo KNWS-FM *101.9 adds Cedar Falls-Cedar Rapids. KFMW 107.9 very weak and is [Waterloo IA obviously not at 1800 feet any more /
MA Nantucket WXJY 96.3 includes "Cape Cod," but I will not list that, as I only show cities in multi-city IDs, not counties, regions, townships, etc. [Petoskey
MI Gaylord WKPK 106.7 adds Traverse City-/
MI Otsego WQXE 100.9 adds Kalamazoo
MI Petoskey WMBN 96.3 adds Traverse City
MO Liberty KKCI 106.5 adds Kansas City (not North Kansas City), "K-Lite 106.5 FM" (strict)
NJ Trenton WKXW 101.5 only as Trenton now
NY Dundee WFLR-FM 95.9 adds Penn Yan-Watkins Glenn [many cities
PA Williamsport WKSB 102.7 rotates among/
SC Manning WHLZ 92.5 adds Sumter-Florence (k), "Wheels"
SC Sumter WWDM 101.3 adds Columbia
TX Robstown KLUX *89.5 adds Corpus Christi, gm, $, some Spanish
VA Colonial Beach WGRQ 95.9 adds Fredericksburg-Lexington Park MD, is r, $, Q-96 (not strict)

NonIDs, Excluding Slogans Given with Calls

From now on, only report slogans you hear frequently used each hour on a station, and only slogans you hear spoken or sung without call letters; report only the most-often heard slogans which are brief and take little space to print. Thus, "Electric 106," for WTRK Philadelphia, does not count, as it is always (or almost always) given along with call letters. This column will, therefore, be devoted to nonIDs and not slogans. You can call a station a "strict" nonIDer if it appears to give only its nonID during the hour (and call letters only on the top of the hour or close to the top of the hour); and a non-strict user of a slogan if call letters are spoken or sung more often than once per hour on a station. If call letters used every break, then the slogan for that station will not be listed. Feel free to write in and we'll clean house on stations that are listed as having nonIDs when in fact they are
CO Denver KPKE 95.7 Denver's Peak[not nonIDers
FL Boca Raton WKQS 99.9 Kiss-FM, still k
GA Athens WAGQ 104.7 Q-105 (The Q rarely used)
GA Eastman WUFF-FM 92.1 Woof 92-FM —heard in mono, but not sure if $ abandoned, or if station was just following correct practice of shutting off $ generator for mono program [Classic Rock-105, $
IN Bedford-Bloomington WQRK 105.5/
IN Monticello WKJM 96.3 Magic-95-FM (strict)
KY Paducah WDDJ 96.9 97-FM (strict)
LA Lafayette KSMB 94.5 Hit Radio 94 1/2
MD Westminster WGRX 100.7 100-GRX
MA Lowell WSSH 99.5 Boston's Wish, mr
MN East Grand Forks KZLT 104.3 K-Light 104, lite r
MN Fergus Falls KBRF-FM 103.3 B-103
MN Minneapolis WLTE 102.9 no NonID, "the new WLTE" still mr
MO Columbia KARO 101.7 K-102 (strict); omitted from VUD, p. 24, July '86
MO Kansas City KPRS 103.3 K-103
MO Lebanon KIRK 103.7 K-Jel, simulcasting with AM
MO St. Joseph KSFT 105.1 Stereo Country 105 (not strict)
NY Kingston WBPM 94.3 FM 94-3
NY Poughkeepsie WPDH 101.5 PDH
NY Rensselaer WQBK-FM 103.9 QBK-FM
NY Sag Harbor WLNG-FM 92.1 "Has never been Power 92"
NC Raleigh WYLT 96.1 W-Lite
ND Bismarck KBYZ 96.5 Z-96, $, r
ND Devils Lake KDVL 102.5 K-Devil-FM
ND Grand Forks KJKJ 107.5 rm, KJ-108
OH Ottawa WQTL 106.3 QT-106
PA New Kensington WXXP 100.7 Double X, still r, some rp
PA Philadelphia WCAU-FM 98.1 98-CAU-FM
WIOQ 102.1 no nonID
WTRK 106.1 no nonID ("Electric-106" always said with call letters)
TX Amarillo KMML 98.7 KML
TX Edinburg KVLY 107.9 K-Valley; b
TX San Antonio KITY 92.9 no nonID (says "Power 93 KITY")
WY Gillette KOLL 96.9 Coal-97
KGWY 100.7 Y-100 (strict)

Facilities Changes Granted

AK Homer K280CJ 103.9 (from K272AT 102.3) [(3000 h,v)
AZ Wickenburg KUUK-FM 105.5 -265'/
AR Blytheville KHLS 96.3 (station says "KHLS going to 96.3 is on hold") change map wording to say "from 96.1"
CA Barstow K221CR *92.1 (from K228CQ 93.5)
GA Waynesboro WYFA 100.9 1900 h,v; 410'
IA Oelwein KOEL-FM 92.3 1000' (10000 h,v)
ME Rockland WMCM 93.5 560 h,v; 610'
MN Moose Lake K220BP *91.9 (from K203AN 88.5) [103.1)
NV Ely K249CL *97.7 (from K276CG/
NH Exeter WERZ 107.1 2500 h,v (350')
NH Keene WKNE-FM 103.7 24500 h,v; 690'
NY Carthage WTOJ 103.1 535 h,v; 620'
NY Cazenovia WITC *88.9 (from 90.9) 130 h,v; 205' [(4000 h,v)
NY Watertown WJNY *90.9 450'/
NC Charlotte WSOC-FM 103.7 1060'
NC Statesville WFMX 105.7 1550' (100 kw)
ND New Town (from Four Bears) KMHA *91.3
OH Medina WDBN 94.9 16200 h,v; 880', reduces coverage to that of a normal class B, losing its grandfathered super-coverage status
OK Marlow KFXI 92.1 1700 h,v; 330'
TN Monterey WRJT 107.1 1250 h,v; 485'
TX Groves KTFA 92.1 310' (3000 h,v)
VA Altavista WKDE-FM 105.5 330' (3000 h,v)
VA Marion WMEV-FM 93.9 adds v, 100000 h,v; 1460', directional
WA Bremerton KHIT 106.9 820' (100000 hv); reduces coverage, locates tower in Seattle to end rim-shottedness there
WV Elkins WVHT 99.3 330' (3000 h,v)
WV Morgantown WWVU *91.7 2400 h,v; 69', directional
WI Land O' Lakes W292CG 106.3 (from W288AE 105.5) [h,v)
WY Casper KTKL 106.9 1835' (100000/

Aug., '86

SCAction, 67 and 92 kHz

CO Greeley KUNC *91.5 no SCA (talking book for blind suspended because of funding)
GA Columbus WNKS 102.9 music resumed after 6 month hiatus, not Muzak
GA Waycross WXVS *90.1 talking book for blind, 67 kHz, classical main channel (same SCA as on WDCO-FM *89.7 Cochran-Macon and WJSP-FM *88.1 Warm Springs-Columbus)
IA Des Moines KGGO 94.9 92 kHz open carrier
IA Mason City KNIQ 93.5 67 kHz data (telemetry)
IA Waterloo KOKZ 105.7 67 kHz †X (data)
KS Lawrence KLZR 105.9 92 kHz Multicomm data
KS Leavenworth KZZC 98.9 no SCA (open carrier only); ID on main carrier with Kansas City
LA Baton Rouge WRKF *89.3 confirmed Muzak 67 kHz; Multicomm 92 kHz
LA Shreveport KVKI 96.5 no SCA (had music)
MI Traverse City WTCM-FM 103.5 no SCA (had NBC news relay)
MO Harrisonville-Kansas City (dual city ID) KCFX 100.7, "The Fox" (not strict), no SCA (had data)
MO Kansas City KBKC 94.9, B-95, has 92 kHz paging (drops carrier), music continues on 67 kHz. Main carrier is rock and soul music
NJ Blairstown WFMV 106.3 67 kHz data
NJ Newark WNWK 105.9 92 kHz Greek (67 kHz is Italian)
NJ Paterson WPAT-FM 93.1 67 kHz data
NJ Zarephath WAWZ *99.1 no SCA (had music)
NY Albany WWOM 100.9 †X 67 kHz telemetry, "FM-101"
NY Lake Success-New York WAPP 103.5 no SCA on 67 or 92 (had data, 67 kHz)
NY New York WYNY 97.1 has 92 kHz Chinese music (a music-only service going out to Chinese restaurants, †E[thnic]); 67 kHz retains background music
WBAI *99.5 talk on 67 and 92 kHz
WNCN 104.3 Multicomm daa 92 kHz (other data on 67 kHz)
WNSR 105.1 data on 92 kHz (and 67)
NY Port Jervis WTSX 96.7 has AM station WDLC on 92 kHz for cable companies' reception (†S still on 67 kHz)
NY Poughkeepsie WSPK 104.7 talk (not data), 67 kHz [(not Muzak)
NC Asheville WKSF 99.9 music, 67 kHz/
RI Providence WBRU 95.5 talking book for the blind (not music), 67 kHz
SC Greenville WESC-FM 92.5 rock SCA (Muzak Foreground I: "I was surprised to find this on 67 kHz, expecting instead for it to be at 92 kHz on WFBC-FM 93.7, which has regular Muzak on its 67 kHz subcarrier")
TX Dallas KQZY 105.3 music, 67 kHz

Readers' Reports and FM News

Waldo Bishop comments about what Charles Hubbell, Kenmore NY wrote: Wonder what he thinks about a variety of stations in "day after day", ranging from St. Petersburg, Sarasota, to Clearwater and Crystal River. Waldo does report that WMEZ 94.1 Pensacola seems to be on low power now. And FL State expects to get a c-p soon for WVFS-FM, "V-89," to have album rock. More details when I find out more.

Nick Lombardi says WFOX 97.1 Gainesville GA now at full power and height (1890'). Chief engineer "says they have noticed a slight falloff in signal level in some of the outlying areas, and attribute it to the extremely dry weather . . (area lakes are half full, ground doesn't contain the usual amount of moisture, etc.)." About the Atlas: "I think the maps would look better (i.e., less cluttered) if you would make what you did on p. 66 (CO) standard. There is really no reason to have to remind the reader every single page that FM stations occupy the spectrum between 88-108 mHz, and then go through a long-winded dissertation on what each class is. Simply explaining them ONCE somewhere in the book would be enough!"

Coming on the air June 27 was CHTZ 97.7 St. Catharines ON.

We Are -FM Radio

Paul L. Gaines sent an article mentioning that Detroiter Joe Krause co-authored a primer on radio behind the scenes (along with Michael Keith), "The Radio Station" (Focal Press, 272 pp., $19.95 softcover). I've tried to get the "FM Atlas" mentioned in my local paper, but the entertainment editor will not do so, as he thinks the book is too specialized for his market, despite the fact that I pointed out to him 75% of cars have FM radio and people are doing more driving than before (lower gas prices, fear of terrorism keeping many in the U.S.A.).

Maryland's Norval Pagenhardt sent a reel-to-reel tape of several Philadelphia and Raleigh stations he heard on tropo, and a letter from a DX listener in Chile, whose English is rather bad and it is hard to make out what he's trying to say. It seems he receives, or tries to receive, PR stations, such as WORO 92.5 Corozal, and FL WRIT 92.7 Stuart. [If you send tapes and what 'em returned, enclose return postage, although I will take your word for a station format and do not require having to listen to it!]

Richard Clark, in DR, reports getting SCAudio from an outboard adapter, the Capri CD-01, connected to his FM tuner and NRD-505 longwave receiver. I know others have gotten SCA by connecting an FM tuner or detector output into a longwave receiver, tuning carefully in the 67 through 92 kHz range.

Paul Swearingen, who DXes many bands, sent a copy of an article he's written for MONITORING TIMES. He quotes from the introductory material in the 10th ed. "FM Atlas," and says in part: "Dr. Elving and others have been hammering away at AM radio's shortcoming since FM started as an underdog, an afterthought to the well-established AM broadcasting industry. But the differences between the two media are really slight, and it's high time that we recognized them..many AM stations are engineered to sound better than quite a few FM stations. It's simply not true that ALL FM stations sound better than ALL AM stations. . AM radio is in a state of transition. But it's a healthy transition . . Another signal that the AM band will continue to remain healthy, after the current transition phase, is the planned expansion of the AM band from the top end of 1605 kHz to 1705 kHz. . . . . Aside from offering unique DX opportunities as they come on the air, the new stations would provide better local/regional service to minorities, noncommercial services and daytime stations." He goes on to describe when AM is superior to FM, such as driving and listening to KFI 640 Los Angeles, WWL 870 New Orleans, WBBM 780 Chicago, WBZ 1030 Boston and WRVA 1140 Richmond in much of the country. He also describes AM stereo and how it sounds good on the Sony SRF-A100. It's an interesting article, complete with FM Atlas plug, although giving the wrong price for the book (it is $9.50 with shipping). The article makes the common fallacy that AM is personified by the 50-kw clear channel stations, whereas the majority of AMs are Class III and IV local stations and daytimers. Not mentioned are directional antenna operations, presunrise powers of only a few watts in many instances, etc., all of which militate against AM providing a consistent service to all of America's population and land area. And if there were a demand for AM stereo, I believe I would have sold my Sony SRF-A100 through the club, where I had it advertised. I have had two of those radios, and had a hard time discerning any stereo separation using the radio's speakers. I sold the latest one I had at the blind convention in Kansas City for $85.

Paul's article is entitled "Making Waves." An even more extreme artic le than what I wrote in the VUD appears in the current "Radio World," which goes out to all U. S. radio stations (mainly to engineers). It is entitled: "AM Improvement Lost Cause," of which I received an advance copy (July 1, 1986 issue), with the editor saying: "I ran your recent submission as a guest editorial (pages 5 and 6). I hope we hear a lot of responses, pro/con/whatever. I find your activities fascinating." Included were my name, address and telephone number, so it will be interesting to see what happens. I commend RW on having the courage to print the article. Among the things I say are: "Our interest in nostalgia notwithstanding, Americans will not go back to AM. FM, which languished for decades in AM's shadow, is destined to take its rightful place as the only purveyor of radio broadcast communications worldwide (save perhaps for international shortwave broadcasting). Thinking that 'it does not matter whether it is AM or FM, the important thing is that is is Radio,' is a fallacy that has been embraced not just by radio management and by the regulators, but unfortunately by the engineering community." If you want a photocopy send 50 cents in cash or mint stamps (yes, Virginia, you can go to the post office and buy a 50 cent stamp!) to me.

The proposal I state for saving what was "once known as AM radio" is to have AM broadcasters cooperate with nearby FM or TV stations and use subcarrier for their programming (FM at 67 or 92 kHz; TV at 78.67 or 102.271 kHz). I outline how I have had a prophetic view of FM's ultimate dominance for some 30 years. Included also is a plug for the club, giving prices for sample copies of the VUD and a year's membership. I have also written an article for a new QST publication on FM subcarrier reception.

In other publication news, "Religious Broadcasting" mentions that WPIT-FM 101.5 Pittsburgh now at or near 50 kw, and they had a "50,000-watt Week" in May. Grand prize was 50 music cassettes, as awarded over the air. Canada's "Broadcast Technology" magazine says FM listening is now 45%, up from 40% in 1984 and 16% in 1977, with 60% of Canadians listening to some FM each week. But Pete Nolan's "M Street Journal" says FM growth in the United Snakes is down somewhat—from a high of 71.8% in the last survey to 71.3%, Spring, 1986. "It is the first time since RADAR surveys began in 1972 that FM failed to register an increase in listenership." Pete's paper also notes the educational FM-Channel 6 TV controversy, in which the CPB and other public radio groups tried to get the FCC to put a freeze on new channel 6 TV allocations and applications, which the FCC turned down. "The issue could potentially be complicated further by the proliferation of new, low-power television stations on channel 6."

From Vancouver, David Sinclair sent an article about a proposal for a nonprofit FM station devoted to the arts, no frequency mentioned, and an item from Victoria about a proposal to bring CBC stereo to that city. It would also include a studio. Article said only "fringe" reception is possible there from CBU-FM Vancouver.

I heard from WWIB 103.7 Ladysmith WI, and they say the Ashland WI 100.9 translator is temporarily off the air. "It may be relocated at Washburn, across the bay, and it will be at the same frequency. We are not presently using our SCA. We were testing for that paging company, and it did not work out. We would like to make use of our SCA, but nothing in the works for the present." They are working on a new Class C station in Rhinelander, "but with the tower between Rhinelander and Wausau. We are now looking for a 900' to 1,000' tower. If you know of a used one, please let us know." I think the station they are trying to get is WZTT 97.5, a c-p which has never come on the air. In Omaha, it appears that KGBI has changed its SCA; station claims to be still on 67 kHz, but data no longer print out commodity information as before.

W. R. McIntosh sent an article, almost with humor, about KIIS

The county beaches . . . will they become KIIS territory?

102.7 Los Angeles trying to get an exclusive at the area beaches for doing promotions and concerts. This has caused stations like KPWR 105.9 to be concerned, and they don't want the county to grant an exclusive to any radio station. Mc said, "At first I thought this was a 'put on', but then I noticed the paper was not dated April 1st."

Eric Fader says "Yes, WEZN 99.9 CT should be listed in the NY area map (see June VUD)." He gives some db figures for his Queens location, which put WEZN above such stations as WEBE 107.9, WZFM 107.1, WDHA 105.5, WFAS-FM 103.9, and WLIR. He said WLYQ 95.9, at 40 db, should also be included.

Nonmember Don Voegele sent an article on how Australia is trying to clear the entire FM band of TV stations—a mistake going back to the 1950s. Article said Australia is the only country having TV in the 88-108 mHz FM band, but consulting my WRTVH I found such countries as Japan, and much of eastern Europe having that situation. WIN-4 in Illawarra seems to be the only Australian broadcaster thus affected, and the government is looking for its ultimately reposing on Australian channels 6, 8 or 11.

After being at the National Federation of the Blind convention in Kansas City as an exhibitor (where our sales of SCA radios were very successful; I am now sold out, save for some clock radios), I can empathize with the following from E. R. Sirovy: "Your print size in VHF-UHF Digest is smaller than some fiche I have seen!" If the printing is as good this month as last, I am sure you will find the VUD easier on the eyes. Steve Russell, who ordered an "FM Atlas," says "I am also a member of WTFDA and enjoy your column very much." Mark Geyman is also in the club and has a Radio Shack 10-element FM yagi antenna, and considering getting a Channel Master Stereo Probe 9. I'd think either would be excellent to DX with, especially with a rotator and the time to give to the hobby, as I have not had this year. Fred McCormack: "I am busy transferring my loggings to the tenth edition of your FM Atlas. It sure is a fine piece of work. I really appreciate that you have finally brought back Canada, although Quebec, etc. map is really wild!"

John Jefferson has some Canada mysteries. He said Allardville NB, CBC, is listed on 97.9 (?), while Penticton BC (CBTP?) is on 88.9. He confirms that KSUE-FM Susanville is on 93.3, having moved from 92.7. KWSP 106.3 Santa Margarita expects to be on by now; "their format is currently a secret. KIBC 90.5 Burney is now aiming for 8-1, with some testing possible" in July. KTSC Pueblo still on 89.5, as of July 5. John reported on many translators, with K207AJ Palo Colorado being on a hill and having its tower downed by mudslides, while K265CF Graeagle (paralleling KNXN 101.9 Quincy) is viable. Driving to Nevada City, John tuned in K257CJ Davis on 99.3, "confirming that it carries KXPR 90.9 Sacramento. Terrible coverage: KJAX Stockton was strong a mile outside of Davis and simply swamped the translator." And he wonders what KSAN-3 Danville is—just an arm of KSAN-1 Pleasanton? My data show it as a separate call sign, and a separate station from KSAN-1, ed.

"I noticed the mention in the latest VUD by someone of the 92.1's in both Tulsa and Houston picking up the classical formats dropped by the Class C stations," writes Pete Nolan. "That's not really a fair assessment for Houston—Seabrook is a lot farther from Houston than Broken Arrow is from Tulsa, and KUHF doubtless has a lot more listeners (and a much better signal) than KLEF-92.1. Incidentally, it could be a lot worse for fine arts lovers— in Phoenix, where KONC 101.5 dropped its fine arts format, it was (as with KUHF) partially picked up by a noncommercial jazz station, KJZZ 91.5, and just this week the KONC call letters were applied for by the new owners of the 1230 in Phoenix—a 1 kw, Class IV AM station. If there's anything worse than relegating fine arts to a Class A station only a few people can hear, it'd be on an AM station where even the few people who CAN hear it have to put up with co-channel interference and dubious fidelity. My sympathies to Phoenix.

"While on Phoenix, as part of its plan to take the market by storm .KIKO-FM (applying for calls KEYX) 100.3 Globe in addition to going to an AOR format and moving its studios to Mesa, will be going stereo. The old KIKO-FM 100.3 was in mono, which, at a distance of 90 miles, was probably the only way the signal was audible in even a portion of the [Phoenix] market." (Pete, let me know if the KEYX transmitter is moved; I would think so if they plan stereo operation and to conquer the Phoenix market, b.e.)

"Lastly, I saw an interview recently with WFBQ Indianapolis's Bob and Tom morning team, which you've mentioned several times in your column as being the target of a campaign to pull advertisers from due to the poor taste relied upon by the program for its 'humor'. According to this article, the campaign has actually backfired—ratings and billings are up at least partially because of all the publicity that campaign generated for the show . . . . . While I have nothing against 'blue' humor per se, I do find B&T's particular show— what I've heard of it—both offensive and flatly not funny. There's a difference between slipping in the occasional offensive joke or profanity because it's a natural part of the audience's lifestyle, and relying on that type of 'entertainment' every time the microphone is opened in a self-conscious effort to shock the audience. There's no excuse for the latter."

Ralph Strobel sent much news from his area, and an article saying how radio wars are erupting for the r audience in Muncie, with WOKZ 104.9 battling it out with WLBC-FM 104.1. WOKZ just bought out AM station WERK, and Ralph wonders if 89.9 Miamisburg OH is going to 96.9 and if Chicago and Park Ridge IL on 90.5 and 90.7 will ever get more than 8 watts? [I don't know anything more than what is in the "FM Atlas" and what has been in this column about those stations—b.e. He also wondered what new frequency KCDA 103.1 Coeur d' Alene ID will go to when it gets 100 kw, which I don't know, with no high powered allocation showing for that town on my lists.] Two people sent an article from the Toronto Star on radio ratings, with CHUM-FM 104.5 leading, and CFRB 1010 on a downhill slide. CBL-FM, misidentified as "CBC-FM" had 3 percent of the audience, "a respectable showing for the highbrow station," while CKO, CJRT, CKLN and CJBC (AM, a French station) brought up the rear. Eric Bueneman sent an article on a school disc jockey, Tim Board, at KCFV *89.5 Ferguson MO, winning an award for being a good student-broadcaster. [See his picture below]

Contributors

Joseph H. Albanese, Altoona PA; Murray Bernstein, New York NY; Waldo F. Bishop, Tallahassee FL; Jeff Blair, Lima OH; Richard Clark, La Vega DR; E. Fader, Bronx NY; Roy Efferson, Baton Rouge LA; Ted Fleischaker, Louisville KY; Ed Frye, Los Angeles CA; Paul L. Gaines, Detroit MI; Mark Geyman, South Euclid OH; Roger Gravelle, St. Thomas ON; V. V. Gubitosi, South River NJ; Joel Hermann, Storm Lake IA. Joel says:

"KXXI 93.3 Des Moines still k—they have begun to chip away at KJJY Ankeny's ratings while not making a dent in k leader KSO-AM. KJJY is buying KMFY-1390. Wouldn't be surprised if they drop the big band format on the AM and simulcast. KHAK-AM-FM Cedar Rapids and KLSS-AM-FM Mason City all simulcast due to FCC rule change. KUOO 103.9 Spirit Lake now 24 hours—they are simulcasting KEEY 99.1 Mankato, 1230 to 5:30 a. m. (same owner). Plenty of Z-99 IDs on 103.9; few mentions of KUOO other than legal IDs; this was their response to KJJG (Spencer IA) expanding to 24 hours." Other contributors:

Clarke Ingram, Gilbert AZ (who will be sending some information on Mexican stations, while driving I-8 to CA); A. Jackson, San Juan Bautista CA; John M. Jefferson, Pleasanton CA; Nick Lombardi, Atlanta GA; Fred McCormack, Fargo ND; W. R. McIntosh, Granada Hills CA; George J. Mileon, Lynn MA; A. J. Morinelli, Omaha NE; Dave Nieman, Akron NY; Peter Nolan, Houston TX; Paul R. Mount, Teaneck NJ; Norval Pagenhardt, Scotland MD; Keith D. Pugh, New Hope AL; Richard and Franklin Reese, Jersey Shore PA; Steve Russell, Tucson AZ; David A. Sinclair, Vancouver BC; E. R. Sirovy, Westmont IL; Warren Steward, WWIB Cornell WI; Ralph Strobel, Muncie IN; Paul Swearingen, Panorama City CA; Bill Thompson, Buffalo NY; Stephen Tuura, St. Catharines ON; Don Voegele, Stockton CA; and Baruch L. Vine, somewhere in America's hinterlands!

TV STATISTICS

Bob Seybold
Bennett Rd.
Dunkirk, NY 14048

August 1986

DXer	Location	Total	UHF	XLTR	ES	AU	MS	YB
Bob Seybold	NY Dunkirk	980	478	110	197	6	30	80
Bill Draeb	WI Kewaunee	909	383	106	193	1	113	53
Jeff Kadet	IL Macomb	650	375	83	119	0	1	83
Bill Eckberg	IL Dixon	543	262	39	123	1	18	85
Don Ruland	WI Kenosha	539	272	39	92	0	31	71
Paul Gaines	MI Detroit	527	249	23	81	0	28	73
Jim Pizzi	NM Lovington	523	239	150	189	0	19	81
Marvin Shults	IL Toulon	492	203	27	123	0	26	[illegible]
Tom Yingling	MD Baltimore	460	228	44	185	0	12	[illegible]
Mike Lapinski	NY Jamestown	424	292	56	47	0	1	78
Fred McCormick	ND Fargo	394	81	105	113	2	1	74
" "	ND Des Lacs	373	28	31	213	0	45	64
Robert Kramer	IL Chicago	388	160	10	90	0	30	??
Mike Hollis	AL Enterprise	371	175	11	75	0	13	80
Roy Barstow	MA Teaticket	350	188	32	84	1	5	71
Dave Nieman	NY Akron	325	253	38	32	0	2	84
Nate Ely	WI Madison	315	180	33	35	0	2	??
Frank Wheeler	PA Erie	290	62	1	228	2	5	55
Fred Norquist	NY Clay	281	143	20	71	0	3	69
Richard Reese	PA Jersey Shore	262	45	0	152	0	28	79
W. R. Hepburn	ON Niagara Falls	242	84	6	84	0	0	76
" "	NT Coral Harbour	10	0	0	9	0	0	84
" "	NT Hall Beach	1	0	0	0	0	0	84
Robert Ross	ON London	242	118	6	69	0	0	76
Allan Michalek	MA Springfield	216	64	6	101	0	0	??
Mike Cunningham	WV Harrisville	195	102	3	43	0	0	83
Ron Purdue	MN Byron	193	97	34	69	0	0	81
John Combs	FL Jacksonville	166	93	9	31	0	0	??
Saul Chernos	ON Toronto	161	6	0	94	0	0	76
" "	ON Brunt River	60	23	0	12	0	0	79
Bob Schweitzer	NJ S. Brunswick	156	104	14	4	0	0	76
Steve Sprachman	NY Seaford	154	84	0	0	0	0	77
John Jefferson	CA Pleasanton	136	50	17	63	0	1	76

Some Personal Best Listed Below:

John Combs, Orlando, FL
Longest:
VHF low trops, KGBT-4 Texas 1028 miles
VHF hi, WRIK-7 Ponce, PR 1178 miles
UHF trops, KWEX-41 San Antonio, TX 1034 miles
E-skip, KDUH-4 Scottsbluff, NE 1541 miles
Shortest:
E-skip, WWAY-3 Wilmington, NC 428 miles

Bill Eckberg, Dixon, IL
Longest:
E-skip, YSR-2 El Salvador 1940 miles
VHF trops, KGUL-11 Galveston, TX 915 miles
UHF trops, WBFF-45 Baltimore, MD 677 miles
UHF XLTR trops K30AE Alva, OK 596 miles
Shortest E-skip, WMCT-5 Memphis, TN 451 miles

Frank Wheeler, Erie, PA
Longest E-skip, CBUT-2 Vancouver, BC 2117 miles

More next time,
73
Bob

SPECIAL REPORT

More South American DX
from Anselmo Roccaforte
in ARGENTINA

During a few days of the past week (July 1 to July 4) there was a big tropo opening to the north of La Plata City and over the River of La Plata and the coast of Uruguay; the MUF was as high as 600 MHz. On thursday the 3rd I had received the the following stations in the VHF-UHF band:

--- FM 88.9 MHz RADIO VENADO TUERTO, Venado Tuerto City, Provincia de Santa Fe. (250 miles from La Plata) (a low power station)

--- TV VHF LT-83-TV Ch. 3 ROSARIO CITY, Prov. Santa Fe. (220 miles). I had seen this station very often but never so good at this time, without noise and no problems of adjacent-channel from ch 2 local.

--- TV UHF Ch. 37 Repeater Ch. 7 Argentina Televisora Color (ATC). Gualeway, Province de Entre Rios. (160 miles)
Note: ch.37 is one of the repeater stations of the head of the network, ATC; with headquarters in Buenos Aires, they feed its repeaters by microwave and by a transponder of INTELSAT. There are few UHF channels in the country, and all are repeater stations; this is one of them, and with low power. I was very lucky to watch one of these stations.

--- VHF HAM 2 m. 147.330 MHz. REPEATER ROSARIO CITY. (160 miles)
147.210 MHz. " " SAN NICOLAS.(180 miles)
147.270 MHz. " " RAFAELA. Prov. Santa fe.(280 mi.)
147.240 MHz " " PARANA. Prov. Entre Rios.(280 mi.)

Sometimes I haven't any DX news to send because we haven't so many stations as in North America. I am doing a study about television in Japan with information from their TV stations. It is interesting to know their design philosophy on equipment and their networks of repeater stations; they are very friendly and sent me much information.

Sincerely yours, su amigo;
Anselmo

STATION BREAK

WTFDA H.Q.
P.O. Box 514
Buffalo NY 14205-0514

WTFDA member ads only. Items may be edited to conserve space.

FOR SALE - Finco P-7 UHF 7' parabolic dish, good condition $50; two Channel Master Hi-Q UHF tunable traps, 40 dB attenuation, $55 ea., Blonder-Tongue CMA-U amp $40, 50 foot telescoping mast (local only) $30. Tom Holmes, 2312 Blakeford Lane, Charlotte NC 28226. (704) 364-9478.

FOR SALE - New Antennacraft P-5 5' dish, $25. Winegard CPH-1 preamp housing, $5. Winegard CP-4800 amp $30. If interested write to: Yefim Mosenkis, 155-22 Jewel Ave., Apt. 7D, Flushing NY 11367.

FOR SALE - Channel Master Hi "Q" trap model 7206 (UHF band) barely used. Excellent condition, $40 + shipping. Jeff Kadet, Box 20, Macomb IL 61455. (309) 833-1809.

YOUR non-commercial ad can appear in the VUD free of charge! Got a piece of DX gear you'd like to sell? Looking for something? Advertise in STATION BREAK. This feature appears on a space available basis. WTFDA and the VHF-UHF DIGEST assume no responsibility for any claims made by advertisers--our trust is implicit, as fellow DXers.

SATELLITE NEWS

George W. Jensen
4604 Anntana Avenue
Baltimore, Maryland
21206-4220

NEW ON THE AIR

FM Subcarrier - C K N M - Yellowknife, NWT. - on ANIK D XPDR 21 - gives freq. 101.9 with ERP of about 140 WATTS in Yellowknife. Programs C/W and oldies in English, Deney and other Indian/Eskimo dialects. News on the hour (Mount.) in English and dialects.

TV - CARIBBEAN SUPERSTATION - Westar 5 - XPDR 16 originates in Aruba/ Netherlands Antilles. Programs lots of old movies and TV series from the 50's and 60's and many C/W videos. Ads for hotels etc. in Aruba and other areas of the Carribean.

NUSTAR NETWORK - ASC 1 - XPDR 11 - Lots of grade B through Z movies and odd programs.

OTHERNESS

Video - Color bars and tone with superimposed ID on SBS-1 (Ku-Band) XPDR 10 SBS 1, 2 & 4 are not supposed to have any video, but this was on the air with an IBM ID. (6-17-86 at 1PM)

SATELLITE OF THE MONTH

RCA - SATCOM 4 83*W Polarity - Odds Vertical/Evens Horizontal

TRANSPONDER/SERVICES CARRIED/SUBCARRIERS

1	Home Shopping Club
2	BRAVO (Evenings) - 5.8 Multiplex Stereo
	RAI (encoded) Sunday AM's
3	Rock Christian Network
4	Nickelodeon (West Coast Feeds)
5	Occasional feeds
6	Madison Square Garden Network (occasional)
7	Liberty Broadcasting Network (NCN) s/c - WWBC Cocoa FL, + others
8	The Silent Network (Sat. AM's) for the Deaf
	People's Choice (Pay-Per-View encoded) PM only and may be bankrupt and off-air
9	Sportsvision (Chicago)
10	American Movie Classics (Evenings)
	American Wholesale Shopping Network (late afternoons)
	Amarillo Livestock Auction (occ. afternoons)
11	Home Sports Entertainment(Houston/Dallas) KKBU Houston under billboard
12	National Jewish Television (Sun 1-4 PM)
	Money Talks (7-8 PM)
13	NESN (New England Sports Net) W J I B - FM Boston under billboard
14	Pratco Shopping Channel
15	very occasional feeds
16	Cable Video Store (1st run films) - ENCODED Not M/A Com
17	very occasional feeds
18	Hit Video U.S.A. (stereo - 5.8/6.8)
19	W P I X - Ch. 11 - New York City
20	FNN - Financial News Network - Days
	Prime Ticket Network (Los Angeles) - Nights
21	The Nostalgia Channel s/c - American Broadcast Museum Radio Station - Texas
22	Home Team Sports - Baltimore/Washington - DC stations
23	New England Sports Channel - Nights
	Racing - Encoded
24	The Playboy Channel - Nights
	occasional feeds day

The equipment here consists of the following:

12' Paraclipse dish	M/A Com Videocipher 2000E Descrambler
D X receiver for Ku-Band	MTI Positioner
Drake ESR 324 for C-Band	Composite Custom Made LNA and LNB
Drake SA-24 Audio/Stereo Adaptor	MGA 19" receiver

randums

Reception here for most satellites is quite good. East beams of Aurora on XPDR 19 and 21 are all the video available here. Satcom 3 & 4 weakish. Because of trees reception of European birds will be difficult, but this past spring when the 12' was erected before the trees went to leaf--a Russian was noted on Goroznit (8&9) with ultra-weak signal on 23 on Brazil-Sat. The Morelos is now using half-transponder channeling with the Europeans due to the heavy demand of the World Cup Soccer matches.

Let me know your finds and reception conditions. Let me know what you would want to see in this column.

'73's

TVRO WATCHERS: SUPPORT WTFDA'S SATELLITE NEWS COLUMN! REPORT TODAY!

* * * PUBLISHER'S NOTES * * *

NEW NORTHERN-FM DX EDITOR DUE TO SEVERAL REASONS, NOT LEAST OF WHICH IS LACK OF AVAILABLE TIME, SAUL CHERNOS HAS ASKED US TO FIND A NEW EDITOR FOR THE NORTHERN FM SECTION, AND I'M HAPPY TO REPORT THAT WE'VE GOT ONE! THIS COLUMN WILL NOW BE EDITED BY: JOE FELA - 150 ROBERT PLACE - SOUTH PLAINFIELD, NJ 07080.

SATELLITE NEWS FINALLY, THE VHF-UHF DIGEST HAS A SECTION FOR THE SATELLITE TV ENTHUSIASTS AMONG US. ESTIMATES ARE THAT AS MANY AS 30% OF WTFDA MEMBERS NOW HAVE HOME SATELLITE EQUIPMENT (OR DIRECT ACCESS TO IT), AND BALTIMORE MEMBER GEORGE JENSEN HAS VOLUNTEERED TO START SATELLITE NEWS, A NEW FEATURE COLUMN DETAILING WHAT YOU'LL FIND ON THE "BIRDS."
NEEDLESS TO SAY, NOT ALL VIDEO AVAILABLE TO THE HOME SATELLITE ENTHUSIAST IS SCRAMBLED, AND THERE'S SOME STRANGE AND HIGHLY INTERESTING STUFF OUT THERE. IT'S NOT ALL VIDEO, EITHER, AS MANY UNIQUE FM SERVICES ARE ALSO THERE TO BE MONITORED. SOME PURISTS MAY OBJECT THAT THIS IS NOT "DX"--THE ARGUMENT BEING THAT THOSE SIGNALS ARE LINE-OF-SIGHT "LOCALS" (FROM 22,300 MILES!)--BUT WITH GOOD EQUIPMENT, YOU CAN WATCH AND HEAR SERVICES THAT AREN'T "SUPPOSED" TO BE TUNED IN YOUR AREA--AND THAT IDEA SOUNDS A LOT LIKE DXING TO US! PLEASE LET WTFDA HQ KNOW WHAT YOU THINK OF THIS COLUMN--IF YOU'VE COME ACROSS SOMETHING OF INTEREST ON A DOWNLINK, LET GEORGE KNOW ABOUT IT! WRITE:
GEORGE JENSEN - 4604 ANNTANA AVENUE - BALTIMORE, MD 21206

REPRINT SERVICE GREAT NEWS ON THIS ONE! NONE OTHER THAN TECHNICAL TOPIX EDITOR TIM MCVEY HAS COME FORTH TO RE-START A WTFDA CLUB ARTICLE REPRINT SERVICE. BE WATCHING FOR FURTHER DETAILS, AND POSSIBLY A NEW REPRINT CATALOG--WE MAY BE ABLE TO INSERT THIS INTO A FUTURE VUD EDITION. A GREAT BIG THANKS GOES TO TIM FOR THIS--IN FACT, HE HAS BEEN DOING THIS INFORMALLY FOR MEMBERS WHO HAVE ASKED HIM FOR COPIES OF ARTICLES IN THE PAST.

ON THE COVER IS THE SEASON REALLY THAT BAD? THE E-SKIP DROUGHT EXPERIENCED BY MANY FM AND TV DXERS MAY HAVE FINALLY EASED UP IN LATE JULY, BUT IT LOOKS LIKE IT'S TOO LATE FOR THAT POOR FELLOW ON THE COVER! THANKS TO DX ARTIST HARRY HAYES FOR ANOTHER CLASSIC V.U.D. COVER.

CLUB PUBLICITY I'VE BEEN MEANING TO THANK SOME VERY KIND V.U.D. READERS AND WTFDA CLUB MEMBERS FOR HELPING TO PUBLICIZE THE HOBBY AND WTFDA IN RECENT WEEKS. FIRST, MANY THANKS GO TO MARK MANUCY, EDITOR OF POPULAR COMMUNICATIONS' BROADCAST TOPIX COLUMN. MARK IS NOT A CLUB MEMBER, BUT IS ONE OF THE DXING WORLD'S MOST WIDELY-READ COLUMNISTS. HIS MENTION OF WTFDA IN THE JUNE POP'COMM RESULTED IN MANY REQUESTS FOR INFORMATION ON OUR ORGANIZATION. WE ALSO ARE VERY GRATEFUL TO FCC FM NEWS EDITOR DR. BRUCE ELVING FOR DEVOTING A CONSIDERABLE AMOUNT OF SPACE TO FM DXING AND WTFDA IN HIS NEW FM ATLAS (THE TENTH EDITION--IF YOU HAVE EVEN THE SLIGHTEST INTEREST IN THE FM BAND, YOU SHOULD HAVE ONE!) AND MENTIONING WTFDA AGAIN IN RADIO WORLD, A TRADE JOURNAL. WE'VE BEEN MENTIONED IN OTHER NEWSLETTERS AND PERIODICALS RELATING TO BROADCASTING AND DXING LATELY, AND EVEN RECEIVED PUBLICITY IN NONE OTHER THAN THE SUPERB BULLETIN OF THE ANTIQUE WIRELESS ASSOCIATION (AWA) SEVERAL MONTHS AGO! WHEN AND IF YOU ARE THE PERSON RESPONSIBLE FOR IT, LET CLUB HQ KNOW--SUCH A GESTURE IS APPRECIATED BY US ALL, AND BENEFITS YOUR HOBBY.

SUGGESTIONS WELCOME! AS YOUR CLUB PUBLISHER, I'M ALWAYS SEEKING IDEAS ON HOW TO IMPROVE THE VUD. ANY COMMENTS OR CRITICISMS ARE WELCOME, AND WILL BE HELD IN THE STRICTEST CONFIDENCE. PLEASE, DON'T WRITE TO ME JUST TO CRITICIZE ANOTHER DX PUBLICATION OR MAGAZINE--MY PRIMARY CONCERN IS THE VHF-UHF DIGEST. 73 & GOOD DX...

--BILL THOMPSON

WTFDA CLUB SUPPLIES

VHF-UHF DIGEST BACK ISSUES
JANUARY 1982 TO PRESENT $1.25
A FEW EARLIER EDITIONS $1.00

NEW QSL REPORT FORMS
FOR REQUESTING QSLs FROM FM or TV STATIONS (blk & yel)
50 for $2.00

UHF TRANSLATOR-LOW POWER TV LIST
A COMPLETE LISTING OF UHF TRANSLATORS AND LPTV STATIONS IN THE CONTINENTAL U.S.A. AS COMPILED BY TELEVISION NEWS EDITOR BILL FAHBER. THIS 1985 EDITION IS AVAILABLE AT $6.95

*** VUD ***
*** BACK ISSUES ***
*** MONTH & NUMBER AVAILABLE ***

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1981	0	5	6	46	41	40	49	17	29	28	33	15
1982	23	22	3	32	29	17	21	29	25	24	42	0
1983	22	6	0	5	0	0	13	0	2	14	0	0
1984	0	2	0	0	2	8	0	0	0	14	11	21
1985	11	8	14	10	17	15	30	31	20	36	5	36
1986	15	22	13	30	31	35	30					

as of 07/15/86

ORDER TODAY!!!

SEND YOUR ORDER TO:

WORLDWIDE TV-FM DX ASSOCIATION - POST OFFICE BOX 514 - BUFFALO, NEW YORK 14205-0514 U.S.A. USE CHECK OR MONEY ORDER (U.S. FUNDS ONLY)

THE FOLLOWING ITEM CAN BE ORDERED DIRECTLY FROM THE SUPPLIER.

FM ATLAS AND STATION DIRECTORY (10th edition) ---- ORDER DIRECT FROM FM ATLAS--	THE ONE EVERYONE HAS TO HAVE FOR SUCCESSFUL FM DXING. THIS IS THE SINGLE MOST COMPLETE SOURCE OF INFO ON THE FM BROADCAST BAND. 241 ANDERSON ROAD - ESKO MN 55733-9413 USA	$9.50 ppd